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                AQ^)/SQSP
L34         104 SEA FILE=REGISTRY ABB=ON  PLU=ON  L33 NOT MULTICHAIN/NTE
L36         102 SEA FILE=REGISTRY ABB=ON  PLU=ON  L34 NOT PMS/CI


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L36         102 S L34 NOT PMS/CI
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L37          59 S L36
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L39           4 S L37 AND NEUROCHEM?/PA,CS
L40           1 S L37 AND WO2000-CA515/AP,PRN
L41          28 S L37 AND (PD<=20000504 OR PRD<=20000504 OR AD<=20000504)
L42          23 S L37 AND (PD<=19990505 OR PRD<=19990505 OR AD<=19990505)
L43          27 S L38-L40,L42
L44           3 S L41 NOT L43
L45          30 S L43,L44
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     FILE 'REGISTRY' ENTERED AT 07:19:09 ON 09 MAR 2005
L46          76 S E1-E76
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=> fil hcaplus
FILE 'HCAPLUS' ENTERED AT 07:19:38 ON 09 MAR 2005
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FILE COVERS 1907 - 9 Mar 2005 VOL 142 ISS 11
FILE LAST UPDATED: 8 Mar 2005 (20050308/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

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L45 ANSWER 1 OF 30 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2004:563390 HCAPLUS
DN 141:122332
ED Entered STN: 14 Jul 2004
TI Amyloid β epitopes, chimeric polypeptides and anti-Aβ antibodies for diagnosis and passive immunization treatment of Alzheimer's disease
IN Schenk, Dale B.
PA Neuralab Limited, Bermuda
SO U.S., 79 pp.
CODEN: USXXAM
DT Patent
LA English
IC ICM C07K016-00
ICS C07K016-18; A61K039-00
NCL 424130100; 530300000; 530350000; 530387100
CC 15-3 (Immunochemistry)
Section cross-reference(s): 9, 63
FAN.CNT 9

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
PI	US 6761888	B1	20040713	US 2000-580018	20000526	
	US 6750324	B1	20040615	US 2000-724552	20001128	<--
	US 6787637	B1	20040907	US 2000-724551	20001128	
	US 2004247591	A1	20041209	US 2004-890070	20040712	
	US 2004265301	A1	20041230	US 2004-890000	20040712	
	US 2004247590	A1	20041209	US 2004-889999	20040713	
PRAI	US 1997-67740P	P	19971202	<--		
	US 1998-80970P	P	19980407	<--		
	US 1998-201430	A2	19981130	<--		
	US 1999-322289	A2	19990528			
	US 2000-580018	A1	20000526			

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
US 6761888	ICM	C07K016-00
	ICS	C07K016-18; A61K039-00
	NCL	424130100; 530300000; 530350000; 530387100
US 6761888	ECLA	A61K039/395
US 6750324	ECLA	A61K038/17A2; A61K038/19B+M; A61K039/00D3;

C07K014/47A3; C07K016/18 <--
US 2004247591 ECLA A61K039/395
US 2004265301 ECLA A61K039/395
US 2004247590 ECLA A61K039/395

AB The invention provides improved agents and methods for treatment of diseases associated with amyloid deposits of Aβ in the brain of a patient. Such methods entail administering agents that induce a beneficial immunogenic response against the amyloid deposit. The methods are useful for prophylactic and therapeutic treatment of Alzheimer's disease. Preferred agents including N-terminal fragments of Aβ and antibodies binding to the same.

ST beta amyloid epitope chimeric protein antibody Alzheimer disease

IT Antibodies and Immunoglobulins
RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(IgG1; β-amyloid epitopes, chimeric polypeptides and anti-Aβ antibodies for diagnosis and passive immunization treatment of Alzheimer's disease)

IT Antibodies and Immunoglobulins
RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(IgG2; β-amyloid epitopes, chimeric polypeptides and anti-Aβ antibodies for diagnosis and passive immunization treatment of Alzheimer's disease)

IT Antibodies and Immunoglobulins
RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(IgG3; β-amyloid epitopes, chimeric polypeptides and anti-Aβ antibodies for diagnosis and passive immunization treatment of Alzheimer's disease)

IT Antibodies and Immunoglobulins
RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(IgG4; β-amyloid epitopes, chimeric polypeptides and anti-Aβ antibodies for diagnosis and passive immunization treatment of Alzheimer's disease)

IT Antibodies and Immunoglobulins
RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(IgG; β-amyloid epitopes, chimeric polypeptides and anti-Aβ antibodies for diagnosis and passive immunization treatment of Alzheimer's disease)

IT Immunostimulants
(adjuvants, Freund's incomplete; β-amyloid epitopes, chimeric polypeptides and anti-Aβ antibodies for diagnosis and passive immunization treatment of Alzheimer's disease)

IT Immunostimulants
(adjuvants; β-amyloid epitopes, chimeric polypeptides and anti-Aβ antibodies for diagnosis and passive immunization treatment of Alzheimer's disease)

IT Drug delivery systems
(carriers; β-amyloid epitopes, chimeric polypeptides and anti-Aβ antibodies for diagnosis and passive immunization treatment of Alzheimer's disease)

IT Antibodies and Immunoglobulins
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(chimeric; β-amyloid epitopes, chimeric polypeptides and anti-Aβ antibodies for diagnosis and passive immunization treatment of Alzheimer's disease)

IT Mental disorder
(cognitive; β-amyloid epitopes, chimeric polypeptides and

anti-Aβ antibodies for diagnosis and passive immunization
treatment of Alzheimer's disease)

IT Cognition
(disorder; β-amyloid epitopes, chimeric polypeptides and
anti-Aβ antibodies for diagnosis and passive immunization
treatment of Alzheimer's disease)

IT Antibodies and Immunoglobulins
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
DGN (Diagnostic use); THU (Therapeutic use); BIOL (Biological study); PREP
(Preparation); USES (Uses)
(fragments; β-amyloid epitopes, chimeric polypeptides and
anti-Aβ antibodies for diagnosis and passive immunization
treatment of Alzheimer's disease)

IT Antibodies and Immunoglobulins
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
DGN (Diagnostic use); THU (Therapeutic use); BIOL (Biological study); PREP
(Preparation); USES (Uses)
(heavy chain; β-amyloid epitopes, chimeric polypeptides and
anti-Aβ antibodies for diagnosis and passive immunization
treatment of Alzheimer's disease)

IT Antibodies and Immunoglobulins
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
DGN (Diagnostic use); THU (Therapeutic use); BIOL (Biological study); PREP
(Preparation); USES (Uses)
(humanized; β-amyloid epitopes, chimeric polypeptides and
anti-Aβ antibodies for diagnosis and passive immunization
treatment of Alzheimer's disease)

IT Diagnosis
(immunodiagnosis; β-amyloid epitopes, chimeric polypeptides and
anti-Aβ antibodies for diagnosis and passive immunization
treatment of Alzheimer's disease)

IT Drug delivery systems
(injections, i.m.; β-amyloid epitopes, chimeric polypeptides and
anti-Aβ antibodies for diagnosis and passive immunization
treatment of Alzheimer's disease)

IT Drug delivery systems
(injections, i.p.; β-amyloid epitopes, chimeric polypeptides and
anti-Aβ antibodies for diagnosis and passive immunization
treatment of Alzheimer's disease)

IT Drug delivery systems
(injections, i.v.; β-amyloid epitopes, chimeric polypeptides and
anti-Aβ antibodies for diagnosis and passive immunization
treatment of Alzheimer's disease)

IT Drug delivery systems
(injections, s.c.; β-amyloid epitopes, chimeric polypeptides and
anti-Aβ antibodies for diagnosis and passive immunization
treatment of Alzheimer's disease)

IT Antibodies and Immunoglobulins
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
DGN (Diagnostic use); THU (Therapeutic use); BIOL (Biological study); PREP
(Preparation); USES (Uses)
(light chain; β-amyloid epitopes, chimeric polypeptides and
anti-Aβ antibodies for diagnosis and passive immunization
treatment of Alzheimer's disease)

IT Epitopes
(mapping; β-amyloid epitopes, chimeric polypeptides and
anti-Aβ antibodies for diagnosis and passive immunization
treatment of Alzheimer's disease)

IT Antibodies and Immunoglobulins
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
DGN (Diagnostic use); THU (Therapeutic use); BIOL (Biological study); PREP
(Preparation); USES (Uses)
(monoclonal; β-amyloid epitopes, chimeric polypeptides and

anti-Aβ antibodies for diagnosis and passive immunization treatment of Alzheimer's disease)

IT Lipid A
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(monophosphates; β-amyloid epitopes, chimeric polypeptides and anti-Aβ antibodies for diagnosis and passive immunization treatment of Alzheimer's disease)

IT Drug delivery systems
(nasal; β-amyloid epitopes, chimeric polypeptides and anti-Aβ antibodies for diagnosis and passive immunization treatment of Alzheimer's disease)

IT Drug delivery systems
(oral; β-amyloid epitopes, chimeric polypeptides and anti-Aβ antibodies for diagnosis and passive immunization treatment of Alzheimer's disease)

IT Antibodies and Immunoglobulins
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(polyclonal; β-amyloid epitopes, chimeric polypeptides and anti-Aβ antibodies for diagnosis and passive immunization treatment of Alzheimer's disease)

IT Drug delivery systems
(topical; β-amyloid epitopes, chimeric polypeptides and anti-Aβ antibodies for diagnosis and passive immunization treatment of Alzheimer's disease)

IT Amyloid
RL: ADV (Adverse effect, including toxicity); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(β-; β-amyloid epitopes, chimeric polypeptides and anti-Aβ antibodies for diagnosis and passive immunization treatment of Alzheimer's disease)

IT Adoptive immunotherapy
Alzheimer's disease
Amyloidosis
B cell (lymphocyte)
Blood
Down's syndrome
Epitopes
Human
Phagocytosis
Protein sequences
Susceptibility (genetic)
Test kits
(β-amyloid epitopes, chimeric polypeptides and anti-Aβ antibodies for diagnosis and passive immunization treatment of Alzheimer's disease)

IT Amyloid precursor proteins
RL: ADV (Adverse effect, including toxicity); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(β-amyloid epitopes, chimeric polypeptides and anti-Aβ antibodies for diagnosis and passive immunization treatment of Alzheimer's disease)

IT Antibodies and Immunoglobulins
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(β-amyloid epitopes, chimeric polypeptides and anti-Aβ antibodies for diagnosis and passive immunization treatment of Alzheimer's disease)

IT Immunoglobulin receptors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(β-amyloid epitopes, chimeric polypeptides and anti-Aβ antibodies for diagnosis and passive immunization treatment of Alzheimer's disease)

IT 721870-93-5 721871-28-9 721871-29-0
RL: BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(amino acid sequence; β-amyloid epitopes, chimeric polypeptides and anti-Aβ antibodies for diagnosis and passive immunization treatment of Alzheimer's disease)

IT 721871-40-5
RL: PRP (Properties)
(unclaimed protein sequence; amyloid β epitopes, chimeric polypeptides and anti-Aβ antibodies for diagnosis and passive immunization treatment of Alzheimer's disease)

IT 109796-61-4 111750-71-1 118821-52-6 122630-93-7 123232-50-8
126779-13-3 126779-14-4 128124-74-3 144500-61-8 158268-86-1
176390-00-4 178949-81-0 184951-43-7 190775-13-4
192066-10-7 194097-09-1 218133-82-5 252256-37-4 311818-23-2
311818-25-4 311818-26-5 311818-27-6 311818-28-7 311818-29-8
311818-30-1 311818-31-2 311818-32-3 311818-33-4 311818-34-5
311818-35-6 311818-36-7 311818-37-8 311818-38-9 **311818-39-0**
311818-40-3 311818-41-4 311818-42-5 311818-43-6 311818-44-7
311818-45-8 311818-46-9 311818-47-0 311818-48-1 311818-49-2
311818-50-5 311818-51-6 311818-52-7 311818-53-8 721398-21-6
RL: PRP (Properties)
(unclaimed sequence; amyloid β epitopes, chimeric polypeptides and anti-Aβ antibodies for diagnosis and passive immunization treatment of Alzheimer's disease)

IT 107761-42-2, Human β-amyloid peptide-(1-42) 110162-70-4
214550-60-4 226917-45-9 310901-08-7 311818-15-2 311818-16-3
311818-17-4 311818-18-5 311818-19-6 311818-20-9 311818-21-0
312263-67-5 721398-20-5 721870-94-6 721870-95-7 721870-96-8
721870-97-9 721870-98-0 721870-99-1 721871-00-7 721871-01-8
RL: BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(β-amyloid epitopes, chimeric polypeptides and anti-Aβ antibodies for diagnosis and passive immunization treatment of Alzheimer's disease)

IT 7784-30-7, Aluminum phosphate 21645-51-2, Aluminum hydroxide, biological studies 141256-04-4, QS 21
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(β-amyloid epitopes, chimeric polypeptides and anti-Aβ antibodies for diagnosis and passive immunization treatment of Alzheimer's disease)

RE.CNT 393 THERE ARE 393 CITED REFERENCES AVAILABLE FOR THIS RECORD
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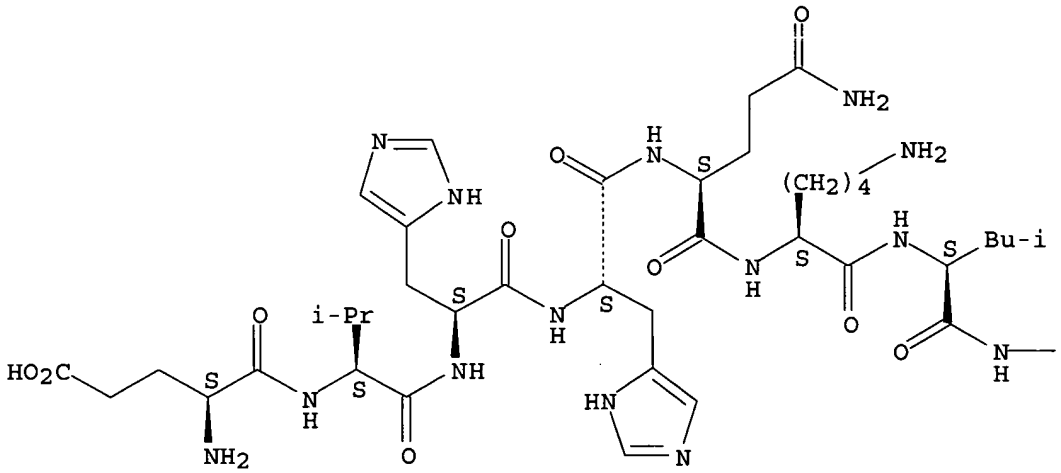
IT **176390-00-4**
RL: PRP (Properties)
(unclaimed sequence; amyloid β epitopes, chimeric polypeptides and anti-Aβ antibodies for diagnosis and passive immunization treatment of Alzheimer's disease)

RN 176390-00-4 HCAPLUS

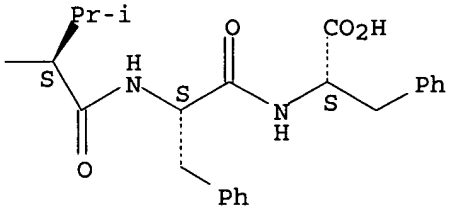
CN L-Phenylalanine, L-α-glutamyl-L-valyl-L-histidyl-L-histidyl-L-glutaminyl-L-lysyl-L-leucyl-L-valyl-L-phenylalanyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



L45 ANSWER 2 OF 30 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2003:701932 HCAPLUS
DN 139:301297
ED Entered STN: 08 Sep 2003
TI Stereoselective Interactions of Peptide Inhibitors with the β-Amyloid Peptide
AU **Chalifour, Robert J.**; McLaughlin, Richard W.; Lavoie, Louis; Morissette, Celine; Tremblay, Nadine; Boule, Marie; Sarazin, Philippe; Stea, Dino; Lacombe, Diane; Tremblay, Patrick; **Gervais, Francine**
CS **Neurochem Inc., Saint-Laurent, QC, H4S 2A1, Can.**
SO Journal of Biological Chemistry (2003), 278(37), 34874-34881
CODEN: JBCHA3; ISSN: 0021-9258
PB American Society for Biochemistry and Molecular Biology
DT Journal
LA English
CC 1-3 (Pharmacology)
AB Residues 16-20 of the β-amyloid peptide (Aβ) function as a self-recognition element during Aβ assembly into fibers. Peptides containing this motif retain the ability to interact with Aβ and, in some cases, potently inhibit its assembly. Replacing L- with D-amino acids could stabilize such peptides and permit their evaluation as therapeutic agents for Alzheimer's disease. Here we have assessed the effect that such a chiral reversal has on inhibitory potency. D-enantiomers of five peptides, KLVFFA, KKLVFFA, KFVFFA, KIVFFA, and KVVFFA, were unexpectedly more active as inhibitors in an in vitro fibrillogenesis assay. CD showed that D-KLVFFA more effectively prevented Aβ adopting the β-sheet secondary structure correlated with fibrillogenesis. Electron microscopy showed that fiber formation was also more strongly inhibited by D-KLVFFA. Heterochiral inhibition was confirmed using D-Aβ, on the principle that enantiomeric proteins exhibit reciprocal chiral biochem. interactions. With D-Aβ, L-KLVFFA was the more potent inhibitor, rather than D-KLVFFA. Most significantly, D-peptides were more potent at reducing the toxicity of both Aβ1-40 and Aβ1-42 toward neuronal cells in culture. This unforeseen heterochiral stereoselectivity of Aβ for D-peptide inhibitors should be considered during future design of peptide-based inhibitors of Aβ neurotoxicity and fibrillogenesis.
ST stereoselective interaction peptide inhibitor beta amyloid peptide; Alzheimers disease treatment peptide
IT Organelle
(fibril, inhibition of fibrillogenesis; stereoselective interactions of

peptide inhibitors with the β-amyloid peptide in relation to Alzheimer's disease treatment)

IT Self-assembly
(inhibition of Aβ assembly; stereoselective interactions of peptide inhibitors with the β-amyloid peptide in relation to Alzheimer's disease treatment)

IT Conformational transition
β-Sheet
(inhibition of Aβ transition to β-sheet secondary structure; stereoselective interactions of peptide inhibitors with the β-amyloid peptide in relation to Alzheimer's disease treatment)

IT Cytoprotective agents
(neuroprotective, protection against neurotoxicity of Aβ; stereoselective interactions of peptide inhibitors with the β-amyloid peptide in relation to Alzheimer's disease treatment)

IT Nerve
Neurotoxicity
(protection against neurotoxicity of Aβ; stereoselective interactions of peptide inhibitors with the β-amyloid peptide in relation to Alzheimer's disease treatment)

IT Alzheimer's disease
Anti-Alzheimer's agents
Human
Structure-activity relationship
(stereoselective interactions of peptide inhibitors with the β-amyloid peptide in relation to Alzheimer's disease treatment)

IT Nerve
(toxicity, protection against neurotoxicity of Aβ; stereoselective interactions of peptide inhibitors with the β-amyloid peptide in relation to Alzheimer's disease treatment)

IT Amyloid
RL: ADV (Adverse effect, including toxicity); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)
(β-; stereoselective interactions of peptide inhibitors with the β-amyloid peptide in relation to Alzheimer's disease treatment)

IT 9005-49-6, Heparin, biological studies
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(inhibition of heparin-promoted Aβ fibrillogenesis; stereoselective interactions of peptide inhibitors with the β-amyloid peptide in relation to Alzheimer's disease treatment)

IT 107761-42-2, Amyloid β 1-42 131438-79-4, Amyloid β peptide(1-40) (synthetic)
RL: ADV (Adverse effect, including toxicity); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)
(stereoselective interactions of peptide inhibitors with the β-amyloid peptide in relation to Alzheimer's disease treatment)

IT **190775-14-5 206198-57-4 307299-71-4 307299-72-5 307299-75-8 342877-55-8 342877-57-0 342877-58-1 342877-59-2 342877-64-9**
RL: PAC (Pharmacological activity); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(stereoselective interactions of peptide inhibitors with the β-amyloid peptide in relation to Alzheimer's disease treatment)

RE.CNT 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD

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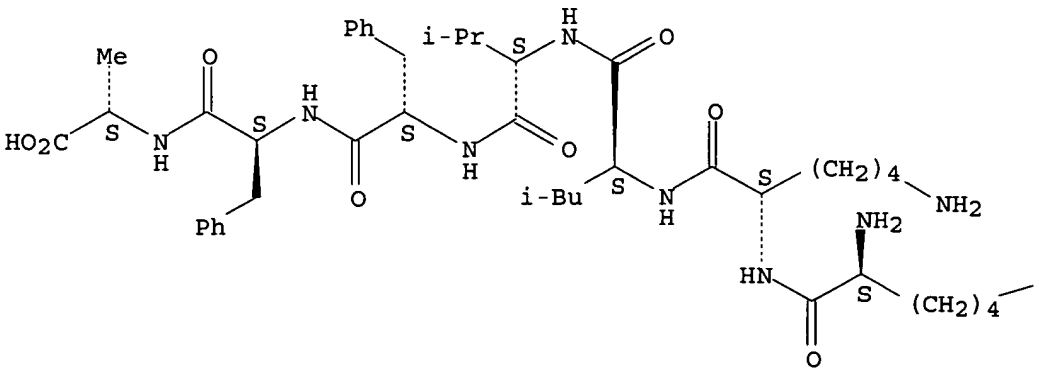
IT **190775-14-5**
RL: PAC (Pharmacological activity); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(stereoselective interactions of peptide inhibitors with the β-amyloid peptide in relation to Alzheimer's disease treatment)

RN 190775-14-5 HCAPLUS

CN L-Alanine, L-lysyl-L-lysyl-L-leucyl-L-valyl-L-phenylalanyl-L-phenylalanyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

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L45 ANSWER 3 OF 30 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2002:770145 HCAPLUS
DN 137:284351
ED Entered STN: 10 Oct 2002
TI Peptides and pharmaceutical compositions thereof for treatment of disorders or diseases associated with abnormal protein folding into amyloid or amyloid-like deposits
IN Soto-Jara, Claudio; Baumann, Marc H.; Frangione, Blas
PA New York University, USA
SO U.S., 51 pp., Cont.-in-part of U.S. 5,948,763.
CODEN: USXXAM
DT Patent
LA English
IC ICM A61K038-00
ICS C07K016-00
NCL 530326000
CC 63-6 (Pharmaceuticals)
Section cross-reference(s): 1
FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6462171	B1	20021008	US 1996-766596	19961212 <--
	US 5948763	A	19990907	US 1996-630645	19960410 <--
	US 2003087407	A1	20030508	US 2002-235483	20020906 <--
PRAI	US 1995-478326	B2	19950607 <--		
	US 1996-630645	A2	19960410 <--		
	US 1996-766596	A1	19961212 <--		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
US 6462171	ICM	A61K038-00
	ICS	C07K016-00
	NCL	530326000
US 6462171	ECLA	A61K049/00H6; C07K005/08H2A; C07K014/47A3; G01N033/68V2 <--
US 5948763	ECLA	A61K049/00H6; C07K005/08H2A; C07K014/47A3; G01N033/68V2 <--
US 2003087407	ECLA	A61K049/00H6; C07K005/08H2A; C07K014/47A3; G01N033/68V2 <--

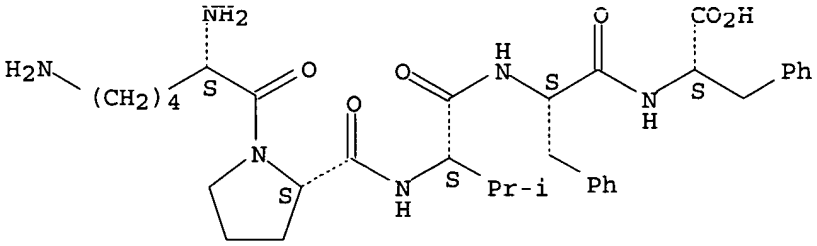
AB Novel peptides capable of interacting with a hydrophobic β-sheet forming cluster of amino acid residues on a protein or peptide for amyloid or amyloid-like deposit formation inhibit and structurally block the abnormal folding of proteins and peptides into amyloid or amyloid-like deposits and into pathol. β-sheet-rich conformation as precursors thereof. Methods for preventing, treating or detecting disorders or diseases associated with amyloid-like fibril deposits, such as Alzheimer's disease and prion-related encephalopathies, are also provided.

ST peptide protein folding inhibitor amyloid prion disease
IT Drug delivery systems
(carriers; peptides and pharmaceutical compns. thereof for treatment of disorders or diseases associated with abnormal protein folding into amyloid or amyloid-like deposits)
IT Prion diseases
Protein folding
Protein sequences
(peptides and pharmaceutical compns. thereof for treatment of disorders or diseases associated with abnormal protein folding into amyloid or amyloid-like deposits)
IT Amyloid
RL: ADV (Adverse effect, including toxicity); BSU (Biological study, unclassified); BIOL (Biological study)
(peptides and pharmaceutical compns. thereof for treatment of disorders or diseases associated with abnormal protein folding into amyloid or amyloid-like deposits)
IT Amyloid
RL: ADV (Adverse effect, including toxicity); BSU (Biological study, unclassified); BIOL (Biological study)
(β-; peptides and pharmaceutical compns. thereof for treatment of disorders or diseases associated with abnormal protein folding into amyloid or amyloid-like deposits)
IT Amino acids, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(D-; peptides and pharmaceutical compns. thereof for treatment of disorders or diseases associated with abnormal protein folding into amyloid or amyloid-like deposits)
IT 112805-81-9 148439-49-0 162470-97-5 162471-00-3 167396-02-3
182912-63-6 182912-66-9 182912-70-5 182912-72-7 182912-74-9
182912-76-1 186606-30-4 186606-34-8 186606-39-3 186606-43-9
186606-48-4 186606-54-2 186606-60-0 186606-70-2 186606-72-4
186606-80-4 186606-84-8 186606-88-2 186606-93-9 186606-96-2
186607-00-1 186607-04-5 186607-08-9 186607-12-5 186607-15-8
242125-69-5 339990-32-8 464892-72-6 464892-73-7 464892-74-8
464892-75-9 464892-76-0 464892-77-1 **464892-78-2**
464892-79-3 464892-80-6 464892-82-8 464892-84-0 464892-85-1
464892-86-2 464892-87-3 464892-88-4 464892-90-8 464892-91-9
RL: PAC (Pharmacological activity); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(peptides and pharmaceutical compns. thereof for treatment of disorders or diseases associated with abnormal protein folding into amyloid or amyloid-like deposits)
IT 152286-31-2 173692-60-9 467233-47-2 467233-48-3 467233-49-4
467233-50-7 467233-51-8 467233-52-9 467233-53-0 467233-54-1
467233-55-2 467233-56-3 467233-57-4 467233-58-5 467233-59-6
467233-60-9 467233-61-0 467233-62-1 467233-63-2
RL: PRP (Properties)
(unclaimed sequence; peptides and pharmaceutical compns. thereof for treatment of disorders or diseases associated with abnormal protein folding into amyloid or amyloid-like deposits)
RE.CNT 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Anderson; US 5169933 A 1992 HCAPLUS
(2) Anon; EP 359347 1990 HCAPLUS
(3) Anon; EP 0584452 1994 HCAPLUS
(4) Anon; WO 9404171 1994 HCAPLUS
(5) Anon; JP 8119996 1996
(6) Anon; WO 9628471 1996 HCAPLUS
(7) Anon; WO 9721728 1997 HCAPLUS
(8) Borman, S; Science 1996, P33 HCAPLUS
(9) Dobeli; Bio Technology 1995, V13, P988 MEDLINE
(10) Findeis; US 5817626 A 1998 HCAPLUS

(11) Findeis; US 5854204 A 1998 HCAPLUS
(12) Findeis; US 5854215 A 1998 HCAPLUS
(13) Findeis; US 5985242 A 1999 HCAPLUS
(14) Hilbich; J Mol Biol 1992, V228, P460 HCAPLUS
(15) Pike; J of Neurochemistry 1995, V64(1), P253 HCAPLUS
(16) Rudinger, J; Peptide Hormones 1976, P1
(17) Seidel; US 5935778 A 1999 HCAPLUS
(18) Soto; J of Biochem 1995, V20(7), P3063
(19) Soto; J of Neurochem 1994, V63, P1191 HCAPLUS
(20) Soto; Neuroscience Letters 1995, V186, P115 HCAPLUS
(21) Tomiyama; BBRC 1994, V204(1), P76 HCAPLUS
(22) Wille; Ciba Foundation Symposium 1996, V199, P181 HCAPLUS
(23) Wisniewski; BBRC 1991, V179(3), P1247 HCAPLUS
(24) Wood; Biochemistry 1995, V34, P724 HCAPLUS

IT **464892-78-2**
RL: PAC (Pharmacological activity); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(peptides and pharmaceutical compns. thereof for treatment of disorders or diseases associated with abnormal protein folding into amyloid or amyloid-like deposits)
RN 464892-78-2 HCAPLUS
CN L-Phenylalanine, L-lysyl-L-prolyl-L-valyl-L-phenylalanyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L45 ANSWER 4 OF 30 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2002:540135 HCAPLUS
DN 137:108295
ED Entered STN: 19 Jul 2002
TI Vaccines comprising all-D fibril peptides for prevention and treatment of Alzheimer's and amyloid-related diseases
IN **Chalifour, Robert**; Hebert, Lise; Kong, Xianqi; **Gervais, Francine**
PA Can.
SO U.S. Pat. Appl. Publ., 28 pp., Cont.-in-part of U.S. Ser. No. 724,842.
CODEN: USXXCO
DT Patent
LA English
IC ICM A61K039-00
NCL 424185100
CC 15-2 (Immunochemistry)
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2002094335	A1	20020718	US 2001-867847	20010529
	WO 2002096937	A2	20021205	WO 2002-CA763	20020529
	WO 2002096937	A3	20030710		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,

LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

EP 1392728 A2 20040303 EP 2002-729715 20020529
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

PRAI US 1999-168594P P 19991129
US 2000-724842 A2 20001128
US 2001-867847 A 20010529
WO 2002-CA763 W 20020529

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
US 2002094335	ICM	A61K039-00
	NCL	424185100
US 2002094335	ECLA	A61K039/00D3; C07K014/47A3; C07K016/18

AB The present invention relates to a stereochem. based "non-self" antigen vaccine for the prevention and/or treatment of Alzheimer's and other amyloid related diseases. The present invention provides a vaccine for the prevention and treatment of Alzheimer's and other amyloid related diseases, which overcomes the drawbacks associated with using naturally occurring peptides, proteins or immunogens. The vaccine comprises fibril peptides consisting of all- D-amino acids.

ST D amino acid fibril peptide amyloid related disease; Alzheimer disease vaccine nonself fibril peptide

IT Gene, animal
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(APP; vaccines comprising all-D fibril peptides for prevention and treatment of Alzheimer's and amyloid-related diseases)

IT Brain, disease
Prion diseases
(Creutzfeldt-Jakob; vaccines comprising all-D fibril peptides for prevention and treatment of Alzheimer's and amyloid-related diseases)

IT Proteins
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(SAA (serum amyloid A), serum; vaccines comprising all-D fibril peptides for prevention and treatment of Alzheimer's and amyloid-related diseases)

IT Functional groups
(acid; vaccines comprising all-D fibril peptides for prevention and treatment of Alzheimer's and amyloid-related diseases)

IT Macrophage
(adherence region; vaccines comprising all-D fibril peptides for prevention and treatment of Alzheimer's and amyloid-related diseases)

IT Functional groups
(alkoxy groups; vaccines comprising all-D fibril peptides for prevention and treatment of Alzheimer's and amyloid-related diseases)

IT Functional groups
(alkoxycarbonyl groups; vaccines comprising all-D fibril peptides for prevention and treatment of Alzheimer's and amyloid-related diseases)

IT Functional groups
(alkoxyphosphonyl; vaccines comprising all-D fibril peptides for prevention and treatment of Alzheimer's and amyloid-related diseases)

IT Functional groups
(alkyloxysulfonyl; vaccines comprising all-D fibril peptides for prevention and treatment of Alzheimer's and amyloid-related diseases)

IT Brain, disease

(amyloid angiopathy; vaccines comprising all-D fibril peptides for prevention and treatment of Alzheimer's and amyloid-related diseases)
IT Functional groups
(aryloxycarbonyl; vaccines comprising all-D fibril peptides for prevention and treatment of Alzheimer's and amyloid-related diseases)
IT Functional groups
(aryloxyl; vaccines comprising all-D fibril peptides for prevention and treatment of Alzheimer's and amyloid-related diseases)
IT Functional groups
(carbamyl; vaccines comprising all-D fibril peptides for prevention and treatment of Alzheimer's and amyloid-related diseases)
IT Toxicity
(cellular; vaccines comprising all-D fibril peptides for prevention and treatment of Alzheimer's and amyloid-related diseases)
IT Infection
Inflammation
(chronic; vaccines comprising all-D fibril peptides for prevention and treatment of Alzheimer's and amyloid-related diseases)
IT Proteins
RL: BPN (Biosynthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(conjugates; vaccines comprising all-D fibril peptides for prevention and treatment of Alzheimer's and amyloid-related diseases)
IT Nervous system, disease
(degeneration; vaccines comprising all-D fibril peptides for prevention and treatment of Alzheimer's and amyloid-related diseases)
IT Amyloidosis
(familial Mediterranean fever; vaccines comprising all-D fibril peptides for prevention and treatment of Alzheimer's and amyloid-related diseases)
IT Fever and Hyperthermia
(familial Mediterranean; vaccines comprising all-D fibril peptides for prevention and treatment of Alzheimer's and amyloid-related diseases)
IT Organelle
(fibril, formation inhibition; vaccines comprising all-D fibril peptides for prevention and treatment of Alzheimer's and amyloid-related diseases)
IT Proteins
RL: BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(fibril; vaccines comprising all-D fibril peptides for prevention and treatment of Alzheimer's and amyloid-related diseases)
IT Antibodies and Immunoglobulins
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(heavy chain; vaccines comprising all-D fibril peptides for prevention and treatment of Alzheimer's and amyloid-related diseases)
IT Dialysis
(hemodialysis; vaccines comprising all-D fibril peptides for prevention and treatment of Alzheimer's and amyloid-related diseases)
IT Functional groups
(hydroxycarbonyl; vaccines comprising all-D fibril peptides for prevention and treatment of Alzheimer's and amyloid-related diseases)
IT Antibodies and Immunoglobulins
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(light chain; vaccines comprising all-D fibril peptides for prevention and treatment of Alzheimer's and amyloid-related diseases)
IT Functional groups
(lower alkyl; vaccines comprising all-D fibril peptides for prevention and treatment of Alzheimer's and amyloid-related diseases)
IT Brain, disease
Prion diseases

(mad cow; vaccines comprising all-D fibril peptides for prevention and treatment of Alzheimer's and amyloid-related diseases)
IT Diabetes mellitus
(non-insulin-dependent; vaccines comprising all-D fibril peptides for prevention and treatment of Alzheimer's and amyloid-related diseases)
IT Antigens
RL: BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(non-self; vaccines comprising all-D fibril peptides for prevention and treatment of Alzheimer's and amyloid-related diseases)
IT Hormones, animal, biological studies
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(peptide; vaccines comprising all-D fibril peptides for prevention and treatment of Alzheimer's and amyloid-related diseases)
IT Salts, biological studies
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(pharmaceutical acceptable; vaccines comprising all-D fibril peptides for prevention and treatment of Alzheimer's and amyloid-related diseases)
IT Esters, biological studies
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(pharmaceutical acceptable; vaccines comprising all-D fibril peptides for prevention and treatment of Alzheimer's and amyloid-related diseases)
IT Functional groups
(phosphono; vaccines comprising all-D fibril peptides for prevention and treatment of Alzheimer's and amyloid-related diseases)
IT Proteins
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(precursor, fibril; vaccines comprising all-D fibril peptides for prevention and treatment of Alzheimer's and amyloid-related diseases)
IT Prion proteins
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(precursor; vaccines comprising all-D fibril peptides for prevention and treatment of Alzheimer's and amyloid-related diseases)
IT Brain, disease
Prion diseases
(scrapie; vaccines comprising all-D fibril peptides for prevention and treatment of Alzheimer's and amyloid-related diseases)
IT Mutagenesis
(site-directed, deletion; vaccines comprising all-D fibril peptides for prevention and treatment of Alzheimer's and amyloid-related diseases)
IT Mutagenesis
(site-directed, insertion; vaccines comprising all-D fibril peptides for prevention and treatment of Alzheimer's and amyloid-related diseases)
IT Mutagenesis
(site-directed, substitution; vaccines comprising all-D fibril peptides for prevention and treatment of Alzheimer's and amyloid-related diseases)
IT Functional groups
(sulfo group; vaccines comprising all-D fibril peptides for prevention and treatment of Alzheimer's and amyloid-related diseases)
IT Acyl groups
Alzheimer's disease
Amino group
Amyloidosis
Drug delivery systems
Epitopes

Human
Hydroxyl group
Peptidomimetics
Prion diseases
Rheumatoid arthritis
Tuberculosis
Vaccines
β-Sheet
(vaccines comprising all-D fibril peptides for prevention and treatment of Alzheimer's and amyloid-related diseases)

IT Antibodies and Immunoglobulins
RL: BPN (Biosynthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(vaccines comprising all-D fibril peptides for prevention and treatment of Alzheimer's and amyloid-related diseases)

IT Amyloid precursor proteins
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(vaccines comprising all-D fibril peptides for prevention and treatment of Alzheimer's and amyloid-related diseases)

IT Aromatic compounds
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(vaccines comprising all-D fibril peptides for prevention and treatment of Alzheimer's and amyloid-related diseases)

IT Gelsolin
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(vaccines comprising all-D fibril peptides for prevention and treatment of Alzheimer's and amyloid-related diseases)

IT Heterocyclic compounds
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(vaccines comprising all-D fibril peptides for prevention and treatment of Alzheimer's and amyloid-related diseases)

IT Keratins
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(vaccines comprising all-D fibril peptides for prevention and treatment of Alzheimer's and amyloid-related diseases)

IT Transthyretin
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(vaccines comprising all-D fibril peptides for prevention and treatment of Alzheimer's and amyloid-related diseases)

IT Fibrinogens
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(α chain; vaccines comprising all-D fibril peptides for prevention and treatment of Alzheimer's and amyloid-related diseases)

IT Microglobulins
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(β-microglobulins; vaccines comprising all-D fibril peptides for prevention and treatment of Alzheimer's and amyloid-related diseases)

IT Amino acids, biological studies
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(D-; vaccines comprising all-D fibril peptides for prevention and treatment of Alzheimer's and amyloid-related diseases)

IT 165196-29-2 342877-52-5 342877-53-6 342877-54-7 **342877-55-8**
342877-56-9 **342877-57-0 342877-58-1**
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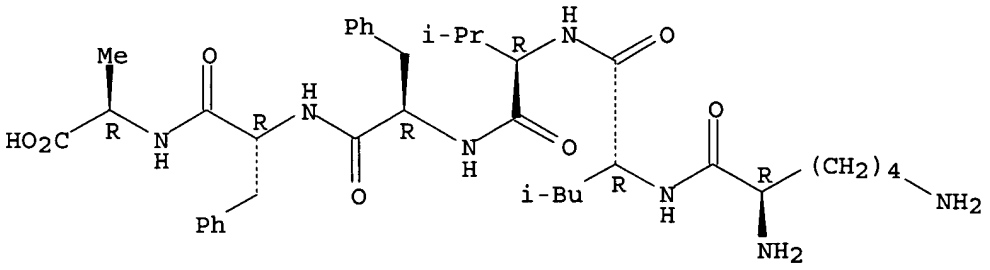
342877-83-2 342877-84-3 342877-85-4 342877-91-2 342877-93-4
342877-94-5 342877-95-6 342877-96-7 342877-97-8 342877-98-9
342877-99-0 342878-00-6 342878-01-7 342878-02-8 342878-03-9
342878-04-0 342878-05-1 342878-06-2 342878-07-3 342878-08-4
342878-09-5 342878-10-8 442915-40-4 442915-67-5 442988-07-0
443128-76-5 443128-77-6 443128-78-7
RL: BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(vaccines comprising all-D fibril peptides for prevention and treatment of Alzheimer's and amyloid-related diseases)

IT 9001-63-2, Lysozyme 85637-73-6, Atrial natriuretic peptide 91448-99-6, Cystatin C 106602-62-4, Islet amyloid polypeptide 216864-07-2D, α-Synuclein, derivs. 216864-08-3D, β-Synuclein, derivs.
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(vaccines comprising all-D fibril peptides for prevention and treatment of Alzheimer's and amyloid-related diseases)

IT **342877-55-8**
RL: BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(vaccines comprising all-D fibril peptides for prevention and treatment of Alzheimer's and amyloid-related diseases)

RN 342877-55-8 HCAPLUS
CN D-Alanine, D-lysyl-D-leucyl-D-valyl-D-phenylalanyl-D-phenylalanyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L45 ANSWER 5 OF 30 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2002:89879 HCAPLUS
DN 136:139864
ED Entered STN: 01 Feb 2002
TI Amyloid targeting imaging agents
IN **Gervais, Francine**; Kong, Xianqi; **Chalifour, Robert**; Migneault, David
PA **Neurochem, Inc., Can.**
SO PCT Int. Appl., 57 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM A61K051-04
ICS A61K051-08
CC 63-6 (Pharmaceuticals)
Section cross-reference(s): 8
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002007781	A2	20020131	WO 2001-CA1071	20010725
	WO 2002007781	A3	20021031		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	US 2002115717	A1	20020822	US 2001-915092	20010724
	CA 2416617	AA	20020131	CA 2001-2416617	20010725
	EP 1303311	A2	20030423	EP 2001-956226	20010725
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
	NO 2003000397	A	20030324	NO 2003-397	20030124
PRAI	US 2000-220808P	P	20000725		
	US 2001-915092	A	20010724		
	WO 2001-CA1071	W	20010725		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2002007781	ICM	A61K051-04
	ICS	A61K051-08
US 2002115717	ECLA	A61K051/04Z; A61K051/08Z

OS MARPAT 136:139864

AB Amyloid-targeting imaging agents such as radiolabeled amyloid targeting mols. and amyloid targeting mol.-chelator conjugates for imaging, e.g., amyloid plaques in vivo, and/or for the treatment of amyloidosis disorders are described. The invention provides amyloid-targeting imaging agents that are useful for imaging sites of amyloid disease. The imaging agents are capable of binding specifically to amyloid plaques, as an aid in diagnosis and/or early treatment of amyloidosis disorders.

ST amyloid targeting imaging agent; amyloidosis imaging agent; peptide radionuclide complex imaging agent

IT Brain, disease
Prion diseases
(Creutzfeldt-Jakob; amyloid targeting imaging agents)

IT Imaging
(acoustic; amyloid targeting imaging agents)

IT Brain, disease
(amyloid angiopathy; amyloid targeting imaging agents)

IT Alzheimer's disease
Amyloidosis
Buffers
Diagnosis
Imaging agents
Radiopharmaceuticals
Reducing agents
(amyloid targeting imaging agents)

IT Amyloid
RL: ADV (Adverse effect, including toxicity); BIOL (Biological study)
(amyloid targeting imaging agents)

IT Chelates
RL: DGN (Diagnostic use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(amyloid targeting imaging agents)

IT Radionuclides, biological studies
RL: DGN (Diagnostic use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(imaging agents labeled with; amyloid targeting imaging agents)
IT Brain, disease
Prion diseases
(kuru; amyloid targeting imaging agents)
IT Brain, disease
Prion diseases
(mad cow; amyloid targeting imaging agents)
IT Diabetes mellitus
(non-insulin-dependent; amyloid targeting imaging agents)
IT Peptides, biological studies
RL: DGN (Diagnostic use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(radiolabeled conjugates; amyloid targeting imaging agents)
IT Brain, disease
Prion diseases
(scrapie; amyloid targeting imaging agents)
IT 100-88-9D, Cyclohexylsulfamic acid, radiolabeled conjugates 573-58-0D, Congo red, radiolabeled conjugates 959-81-9D, radiolabeled conjugates 1119-23-9D, radiolabeled conjugates 1119-25-1D, radiolabeled conjugates 1119-71-7D, radiolabeled conjugates 1119-93-3D, radiolabeled conjugates 1119-95-5D, radiolabeled conjugates 1119-96-6D, radiolabeled conjugates 1119-98-8D, radiolabeled conjugates 1119-99-9D, radiolabeled conjugates 1120-00-9D, radiolabeled conjugates 1120-03-2D, radiolabeled conjugates 1120-05-4D, radiolabeled conjugates 1138-84-7D, radiolabeled conjugates 1829-00-1D, Thiazol yellow g, radiolabeled conjugates 2390-54-7D, Thioflavin t, radiolabeled conjugates 2610-05-1D, Chicago sky blue 6B, radiolabeled conjugates 2785-06-0D, radiolabeled conjugates 3095-95-2D, radiolabeled conjugates 3119-93-5D, radiolabeled conjugates 3785-01-1D, radiolabeled conjugates 4033-31-2D, radiolabeled conjugates 4443-32-7D, radiolabeled conjugates 4444-23-9D, radiolabeled conjugates 4481-44-1D, radiolabeled conjugates 4720-61-0D, radiolabeled conjugates 10043-49-9D, Au 198, imaging agents labeled with 10043-66-0D, I 131, imaging agents labeled with 10098-91-6D, Y 90, imaging agents labeled with 10098-97-2D, Sr 90, imaging agents labeled with 10198-40-0D, Co 60, imaging agents labeled with 13501-35-4D, radiolabeled conjugates 13967-65-2D, Ho 166, imaging agents labeled with 13981-25-4D, imaging agents labeled with 13981-50-5D, Co 57, imaging agents labeled with 13981-56-1D, Fluorine 18, imaging agents labeled with 14119-09-6D, Ga 67, imaging agents labeled with 14158-27-1D, Sr 89, imaging agents labeled with 14158-31-7D, I 125, imaging agents labeled with 14276-65-4D, Gd-153, imaging agents labeled with 14378-26-8D, Rhenium-188, imaging agents labeled with 14391-11-8D, Au 199, imaging agents labeled with 14392-02-0D, Cr 51, imaging agents labeled with 14913-89-4D, Rh 105, imaging agents labeled with 14933-09-6D, radiolabeled conjugates 14981-64-7D, imaging agents labeled with 14998-63-1D, Rhenium-186, imaging agents labeled with 15064-65-0D, Tl 201, imaging agents labeled with 15214-89-8D, radiolabeled conjugates 15715-08-9D, I 123, imaging agents labeled with 15750-15-9D, imaging agents labeled with 15757-86-5D, Copper-67, imaging agents labeled with 15758-35-7D, imaging agents labeled with 15766-00-4D, Sm 153, imaging agents labeled with 20694-16-0 29777-99-9D, radiolabeled conjugates 38878-02-3D, radiolabeled conjugates 40265-71-2D, radiolabeled conjugates 42457-53-4D, radiolabeled conjugates 42846-15-1D, radiolabeled conjugates 49625-94-7D, radiolabeled conjugates 50567-35-6D, radiolabeled conjugates 52962-42-2D, radiolabeled conjugates 58431-88-2D, radiolabeled conjugates 63555-51-1D, radiolabeled conjugates 63585-09-1D, radiolabeled conjugates 72943-20-5D, radiolabeled conjugates 75708-92-8D, Folic acid dihydrate, radiolabeled conjugates 76936-63-5D, radiolabeled conjugates 77337-76-9D, radiolabeled conjugates 80969-51-3D, radiolabeled conjugates 82611-83-4D, radiolabeled conjugates 83678-67-5, Gadolinium-DOTA 92014-92-1D, radiolabeled conjugates 101373-15-3D, radiolabeled conjugates **153247-40-6D**, radiolabeled conjugates

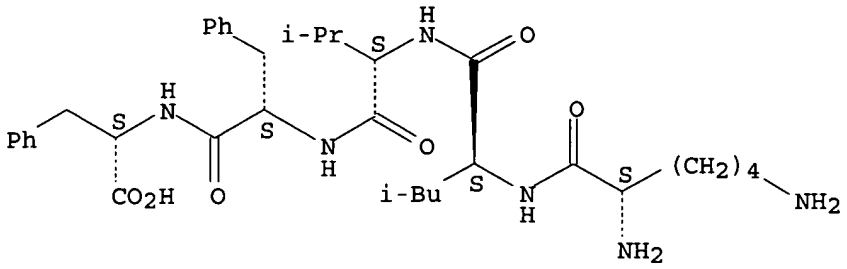
176390-19-5D, radiolabeled conjugates 176390-21-9D, radiolabeled conjugates **183746-61-4D**, radiolabeled conjugates **190775-14-5D**, radiolabeled conjugates 193204-15-8D, radiolabeled conjugates 220213-38-7D, radiolabeled conjugates 256954-42-4D, radiolabeled conjugates 256954-43-5D, radiolabeled conjugates 256954-44-6D, radiolabeled conjugates 256954-45-7D, radiolabeled conjugates 256954-46-8D, radiolabeled conjugates 256954-47-9D, radiolabeled conjugates 303956-74-3D, radiolabeled conjugates 303956-75-4D, radiolabeled conjugates 303956-76-5D, radiolabeled conjugates 303956-77-6D, radiolabeled conjugates 303956-78-7D, radiolabeled conjugates 303956-79-8D, radiolabeled conjugates 303956-80-1D, radiolabeled conjugates 303956-81-2D, radiolabeled conjugates 303956-82-3D, radiolabeled conjugates 303956-83-4D, radiolabeled conjugates 303956-84-5D, radiolabeled conjugates 303956-85-6D, radiolabeled conjugates 303956-86-7D, radiolabeled conjugates 303956-88-9D, 1-Piperidinebutanesulfonic acid, radiolabeled conjugates 303956-89-0D, radiolabeled conjugates 303956-90-3D, radiolabeled conjugates 303956-91-4D, radiolabeled conjugates 303956-92-5D, radiolabeled conjugates 303956-93-6D, radiolabeled conjugates 303956-94-7D, radiolabeled conjugates 303956-95-8D, radiolabeled conjugates 303956-99-2D, radiolabeled conjugates **307299-71-4D**, radiolabeled conjugates **307299-72-5D**, radiolabeled conjugates 307299-73-6D, radiolabeled conjugates **307299-74-7D**, radiolabeled conjugates **307299-75-8D**, radiolabeled conjugates **307299-76-9D**, radiolabeled conjugates 307299-78-1D, radiolabeled conjugates 309752-14-5D, radiolabeled conjugates **342877-55-8D**, radiolabeled conjugates **374068-19-6D**, radiolabeled conjugates 393175-03-6D, radiolabeled conjugates 393175-06-9D, radiolabeled conjugates 393175-19-4D, radiolabeled conjugates 393175-22-9D, radiolabeled conjugates 393175-29-6D, radiolabeled conjugates 393175-41-2D, radiolabeled conjugates 393175-43-4D, radiolabeled conjugates 393175-46-7D, radiolabeled conjugates 393175-50-3D, radiolabeled conjugates 393175-52-5D, radiolabeled conjugates 393175-54-7D, radiolabeled conjugates 393175-56-9D, radiolabeled conjugates 393175-58-1D, radiolabeled conjugates 393175-60-5D, radiolabeled conjugates 393175-62-7D, radiolabeled conjugates 393175-64-9D, radiolabeled conjugates 393175-66-1D, radiolabeled conjugates 393175-68-3D, radiolabeled conjugates 393175-70-7D, radiolabeled conjugates 393175-72-9D, radiolabeled conjugates 393175-74-1D, radiolabeled conjugates 393175-76-3D, radiolabeled conjugates 393175-78-5D, radiolabeled conjugates 393175-88-7D, radiolabeled conjugates 393176-17-5D, radiolabeled conjugates 393176-41-5D, radiolabeled conjugates **393176-54-0D**, radiolabeled conjugates **393176-55-1D**, radiolabeled conjugates **393176-56-2D**, radiolabeled conjugates 393176-57-3D, radiolabeled conjugates **393176-58-4D**, radiolabeled conjugates **393176-60-8D**, radiolabeled conjugates **393176-63-1D**, radiolabeled conjugates **393176-65-3D**, radiolabeled conjugates 393176-67-5D, radiolabeled conjugates 393176-68-6D, radiolabeled conjugates 393176-70-0D, radiolabeled conjugates 393176-72-2D, radiolabeled conjugates 393176-74-4D, radiolabeled conjugates 393176-76-6D, radiolabeled conjugates
RL: DGN (Diagnostic use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(amyloid targeting imaging agents)

IT 14133-76-7D, imaging agents labeled with 14885-78-0D, imaging agents labeled with
RL: DGN (Diagnostic use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(metastable; amyloid targeting imaging agents)

IT **153247-40-6D**, radiolabeled conjugates
RL: DGN (Diagnostic use); THU (Therapeutic use); BIOL (Biological study);

USES (Uses)
(amyloid targeting imaging agents)
RN 153247-40-6 HCAPLUS
CN L-Phenylalanine, L-lysyl-L-leucyl-L-valyl-L-phenylalanyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L45 ANSWER 6 OF 30 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2001:844884 HCAPLUS
DN 136:665
ED Entered STN: 21 Nov 2001
TI Modified peptide modulators of amyloid aggregation
IN Findeis, Mark A.; Benjamin, Howard; Garnick, Marc B.; Gefter, Malcolm L.; Hundal, Arvind; Kasman, Laura; Musso, Gary; Signer, Ethan R.; Wakefield, James; Reed, Michael J.
PA Praecis Pharmaceuticals Incorporated, USA
SO U.S., 54 pp., Cont.-in-part of U.S. Ser. No. 548,998, abandoned.
CODEN: USXXAM
DT Patent
LA English
IC ICM A61K038-02
ICS A61K038-17; C07K001-113; C07K014-47
NCL 424094300
CC 1-11 (Pharmacology)
Section cross-reference(s): 9, 34, 63
FAN.CNT 7

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
PI	US 6319498	B1	20011120	US 1996-617267	19960314	<--
	US 5817626	A	19981006	US 1995-404831	19950314	<--
	US 5854215	A	19981229	US 1995-475579	19950607	<--
	AU 759036	B2	20030403	AU 2000-35389	20000519	<--
	US 2002098173	A1	20020725	US 2001-972475	20011004	<--
	AU 769915	B2	20040212	AU 2002-15539	20020211	<--
	US 2004005307	A1	20040108	US 2003-463729	20030617	<--
PRAI	US 1995-404831	A2	19950314	<--		
	US 1995-475579	A2	19950607	<--		
	US 1995-548998	B2	19951027	<--		
	AU 1996-52524	A3	19960314	<--		
	US 1996-617267	A1	19960314	<--		
	AU 1997-42387	A3	19970827	<--		
	US 2001-972475	A1	20011004			

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES	
US 6319498	ICM	A61K038-02	
	ICS	A61K038-17; C07K001-113; C07K014-47	
	NCL	424094300	
US 6319498	ECLA	C07K014/47A3	<--

US 5817626 ECLA C07K014/47A3 <--
US 5854215 ECLA C07K014/47A3 <--
US 2002098173 ECLA C07K014/47A3 <--
US 2004005307 ECLA C07K014/47A3 <--
OS MARPAT 136:665
AB Compds. that modulate the aggregation of amyloidogenic proteins or peptides are disclosed. The modulators of the invention can promote amyloid aggregation or, more preferably, can inhibit natural amyloid aggregation. In a preferred embodiment, the compds. modulate the aggregation of natural β amyloid peptides (β-AP). In a preferred embodiment, the β amyloid modulator compds. are comprised of an Aβ aggregation core domain and a modifying group coupled thereto such that the compound alters the aggregation or inhibits the neurotoxicity of natural β amyloid peptides when contacted with the peptides. Furthermore, the modulators are capable of altering natural β-AP aggregation when the natural β-APs are in a molar excess amount relative to the modulators. Pharmaceutical compns. comprising the compds. of the invention, and diagnostic and treatment methods for amyloidogenic diseases using the compds. of the invention, are also disclosed.
ST peptide deriv prepn amyloid aggregation modulation; amyloidogenic disease peptide deriv amyloid aggregation modulation
IT Amyloid
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(A, modified; modified peptide modulators of amyloid aggregation)
IT Apolipoproteins
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(A-I, modified; modified peptide modulators of amyloid aggregation)
IT Proteins
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(amyloidogenic, modified; modified peptide modulators of amyloid aggregation)
IT Antibodies and Immunoglobulins
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(light chain, κ and λ, modified; modified peptide modulators of amyloid aggregation)
IT Drug delivery systems
Nerve
Neurotoxicity
Pharmacokinetics
(modified peptide modulators of amyloid aggregation)
IT Amyloid
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(modified peptide modulators of amyloid aggregation)
IT Fibrinogens
Gelsolin
Peptides, biological studies
Prion proteins
Transthyretin
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(modified; modified peptide modulators of amyloid aggregation)
IT Peptides, biological studies
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(retro-inverso; modified peptide modulators of amyloid aggregation)
IT Nerve
(toxicity; modified peptide modulators of amyloid aggregation)
IT Amyloid

RL: BSU (Biological study, unclassified); BIOL (Biological study)
(β-; modified peptide modulators of amyloid aggregation)

IT Microglobulins
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(β2-, modified; modified peptide modulators of amyloid aggregation)

IT Amino acids, biological studies
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(D-; modified peptide modulators of amyloid aggregation)

IT 81-25-4, Cholic acid
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(modified peptide modulators of amyloid aggregation)

IT 183745-81-5DP, biotinylated 350032-71-2DP, biotinylated
RL: BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(modified peptide modulators of amyloid aggregation)

IT 2577-40-4D, N-terminal cholyl derivs. 10183-34-3D, N-terminal cholyl derivs. 13116-21-7D, N-terminal cholyl derivs. 64533-15-9D, N-terminal cholyl derivs. 123529-23-7 123529-23-7D, N-terminal derivs. **134649-29-9D**, N-terminal cholyl derivs. 152286-31-2D, N-terminal cholyl derivs. **153247-40-6 153247-40-6D**, N-terminal cholyl derivs. **153247-40-6D**, iminobiotinylated 153247-42-8D, N-terminal cholyl derivs. 156858-22-9 173923-64-3D, N-terminal cholyl derivs. **176390-00-4D**, N-terminal cholyl derivs. **176390-02-6D**, N-terminal cholyl derivs. **176390-05-9D**, N-terminal cholyl derivs. **176390-09-3D**, N-terminal cholyl derivs. **176390-14-0D**, N-terminal cholyl derivs. 176390-18-4D, N-terminal cholyl derivs. 176390-24-2D, N-terminal cholyl derivs. 182912-78-3 182912-78-3D, N-terminal cholyl derivs. 182912-79-4D, N-terminal cholyl derivs. 183745-81-5 183745-81-5D, N-terminal derivs. 183745-82-6 183745-82-6D, N-terminal conjugates **183746-61-4 183746-61-4D**, N-terminal cholyl derivs. **183746-61-4D**, N-terminal derivs. 183746-77-2 183746-77-2D, N-terminal cholyl derivs. 183746-96-5 183746-98-7 183746-98-7D, N-terminal derivs. 183746-99-8 183746-99-8D, N-terminal derivs. 183906-01-6 183906-04-9 183906-05-0 183906-07-2 183906-08-3 183906-09-4 183906-10-7 183906-12-9 192699-33-5D, N-terminal cholyl derivs. 204333-52-8D, N-terminal cholyl derivs. 250370-63-9D, N-terminal cholyl derivs. 321913-13-7D, N-terminal cholyl derivs. 362652-21-9 362652-21-9D, N-terminal derivs. 365537-59-3D, N-terminal cholyl derivs. 365537-60-6D, N-terminal cholyl derivs. 365537-61-7D, N-terminal cholyl derivs. 365537-62-8D, N-terminal cholyl derivs. 365537-63-9D, N-terminal cholyl derivs. 365537-64-0D, N-terminal cholyl derivs. 365537-65-1D, N-terminal cholyl derivs. 365537-66-2D, N-terminal cholyl derivs. 374068-10-7D, N-terminal cholyl derivs. 374068-11-8D, N-terminal cholyl derivs. 374068-12-9D, N-terminal cholyl derivs. 374068-13-0D, N-terminal cholyl derivs. 374068-14-1D, N-terminal cholyl derivs. 374068-15-2D, N-terminal cholyl derivs. 374068-16-3D, N-terminal cholyl derivs. 374068-17-4D, N-terminal cholyl derivs. 374068-18-5D, N-terminal cholyl derivs. **374068-19-6D**, N-terminal cholyl derivs. **374068-20-9D**, N-terminal derivs. **374068-21-0D**, N-terminal cholyl derivs. 374068-22-1D, N-terminal cholyl derivs. 374068-23-2D, N-terminal cholyl derivs. 374068-24-3D, N-terminal cholyl derivs. 374068-25-4D, N-terminal cholyl derivs.
RL: BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(modified peptide modulators of amyloid aggregation)

IT 9001-63-2D, Lysozyme, modified 9007-12-9D, Calcitonin, modified 56645-65-9D, Procalcitonin, modified 85637-73-6D, Atrial natriuretic factor, modified 91448-99-6D, Cystatin C, modified 106602-62-4D, Islet amyloid polypeptide, modified

RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(modified peptide modulators of amyloid aggregation)
IT 183745-81-5D, resin-bound
RL: PRP (Properties); RCT (Reactant); RACT (Reactant or reagent)
(modified peptide modulators of amyloid aggregation)
IT 58-85-5, Biotin
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction; modified peptide modulators of amyloid aggregation)
IT 134500-80-4 169593-16-2 365537-65-1 374068-23-2 375376-36-6 375798-27-9
RL: PRP (Properties)
(unclaimed protein sequence; modified peptide modulators of amyloid aggregation)
IT 10183-34-3 **176390-05-9 176390-09-3 176390-14-0** 176390-18-4 182912-79-4 183486-00-2 192699-33-5 **206198-57-4** 250370-63-9 250370-72-0 **365537-51-5 365537-52-6** 365537-59-3 365537-60-6 365537-61-7 365537-62-8 365537-63-9 365537-64-0 365537-66-2 374068-18-5 **374068-21-0** 374068-22-1 374068-24-3 374068-25-4 375376-34-4 375376-38-8 375376-40-2 375376-41-3 375376-42-4
RL: PRP (Properties)
(unclaimed sequence; modified peptide modulators of amyloid aggregation)
RE.CNT 78 THERE ARE 78 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
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(2) Anon; EP 554887 A1 1993 HCAPLUS
(3) Anon; WO 9304194 1993 HCAPLUS
(4) Anon; WO 9428412 1994 HCAPLUS
(5) Anon; EP 641861 A1 1995 HCAPLUS
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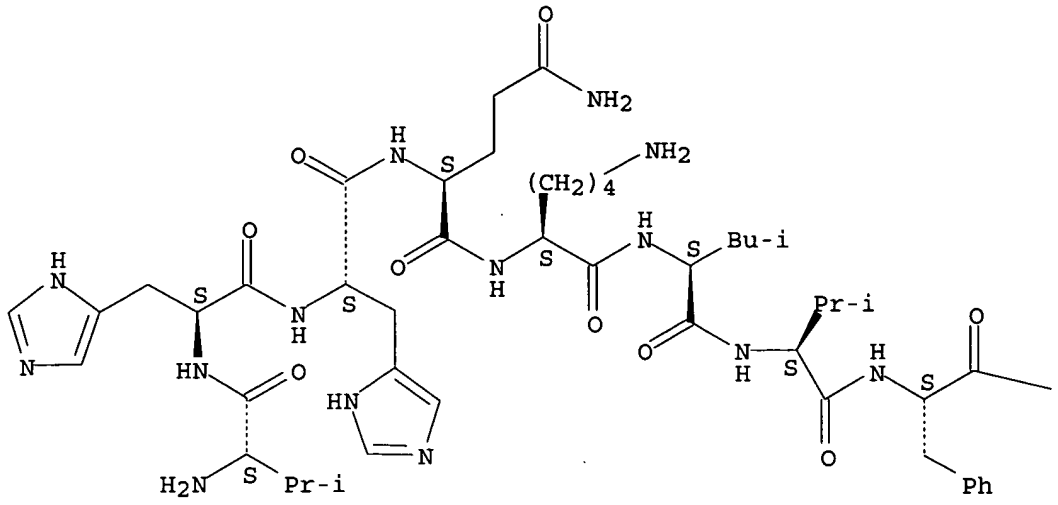
IT **134649-29-9D**, N-terminal cholyl derivs.
RL: BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(modified peptide modulators of amyloid aggregation)

RN 134649-29-9 HCAPLUS

CN L-Phenylalanine, L-valyl-L-histidyl-L-histidyl-L-glutaminyl-L-lysyl-L-leucyl-L-valyl-L-phenylalanyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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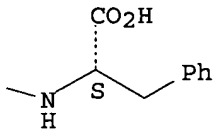

L45 ANSWER 7 OF 30 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2001:757810 HCAPLUS
DN 135:298818
ED Entered STN: 17 Oct 2001
TI D-amino acid-containing peptide modulators of β-amyloid peptide aggregation
IN Findeis, Mark A.; Gefter, Malcolm L.; Musso, Gary; Signer, Ethan R.; Wakefield, James; Molineaux, Susan; Chin, Joseph; Lee, Jung-Ja; Kelley, Michael; Komar-Panicucci, Sonja; Arico-Muendel, Christopher C.; Phillips, Kathryn; Hayward, Neil J.
PA Praecis Pharmaceuticals, Inc., USA
SO U.S., 44 pp., Cont.-in-part of U.S. Ser. No. 616,081.
CODEN: USXXAM
DT Patent
LA English
IC ICM A61K038-06
ICS A61K038-07; A61K038-08; A61K038-10
NCL 514002000

CC 1-12 (Pharmacology)
Section cross-reference(s): 34, 63

FAN.CNT 7

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
PI	US 6303567	B1	20011016	US 1996-703675	19960827	<--
	US 5817626	A	19981006	US 1995-404831	19950314	<--
	US 5854215	A	19981229	US 1995-475579	19950607	<--
	CA 2262453	AA	19980305	CA 1997-2262453	19970827	<--
	WO 9808868	A1	19980305	WO 1997-US15166	19970827	<--
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	AU 741199	B2	20011122			
	EP 929574	A1	19990721	EP 1997-940663	19970827	<--
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	JP 2001500852	T2	20010123	JP 1998-511914	19970827	<--
	US 6277826	B1	20010821	US 1999-356931	19990719	<--
	AU 759036	B2	20030403	AU 2000-35389	20000519	<--
	US 2002103134	A1	20020801	US 2001-895443	20010629	<--
	US 6689752	B2	20040210			
	AU 769915	B2	20040212	AU 2002-15539	20020211	<--
PRAI	US 1995-404831	A2	19950314	<--		
	US 1995-475579	A2	19950607	<--		
	US 1995-548998	B2	19951027	<--		
	US 1996-616081	B2	19960314	<--		
	AU 1996-52524	A3	19960314	<--		
	US 1996-703675	A	19960827	<--		
	US 1997-897342	A	19970721	<--		
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	US 1997-920162	A1	19970827	<--		
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	US 1999-356931	A1	19990719			

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES	
US 6303567	ICM	A61K038-06	
	ICS	A61K038-07; A61K038-08; A61K038-10	
	NCL	514002000	
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US 5817626	ECLA	C07K014/47A3	<--
US 5854215	ECLA	C07K014/47A3	<--
WO 9808868	ECLA	C07K014/47A3	<--
US 5985242	ECLA	C07K014/47A3	<--
US 6277826	ECLA	C07K014/47A3	<--
US 2002103134	ECLA	C07K014/47A3	<--

OS MARPAT 135:298818

AB Compds. that modulate natural β amyloid peptide aggregation are provided. The modulators of the invention comprise a peptide, preferably based on a β amyloid peptide, that is comprised entirely of D-amino acids. Preferably, the peptide comprises 3-5 D-amino acid residues and includes at least two D-amino acid residues independently selected from D-leucine, D-phenylalanine, and D-valine. In a particularly preferred embodiment, the peptide is a retro-inverso isomer of a β amyloid peptide, preferably a retro-inverso isomer of Aβ17-21 . In certain

embodiments, the peptide is modified at the amino-terminus, the carboxyl-terminus, or both. Preferred amino-terminal modifying groups include cyclic, heterocyclic, polycyclic and branched alkyl groups. Preferred carboxyl-terminal modifying groups include an amide group, an alkyl amide group, an aryl amide group, and a hydroxy group. Pharmaceutical compns. comprising the compds. of the invention, and diagnostic and treatment methods for amyloidogenic diseases (e.g. Alzheimer's disease) using the compds. of the invention, are also disclosed.

ST D amino acid peptide amyloid modulator; Alzheimer disease D amino acid peptide; retro inverso peptide amyloid modulator

IT Biological transport
(drug; D-amino acid-containing peptide modulators of β-amyloid peptide aggregation)

IT Cytoprotective agents
(neuroprotectants; D-amino acid-containing peptide modulators of β-amyloid peptide aggregation)

IT Toxicity
(neurotoxicity; D-amino acid-containing peptide modulators of β-amyloid peptide aggregation)

IT Cerebrospinal fluid
(peptide stability in; D-amino acid-containing peptide modulators of β-amyloid peptide aggregation)

IT Peptides, biological studies
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(retro-inverso; D-amino acid-containing peptide modulators of β-amyloid peptide aggregation)

IT Nerve
(toxicity; D-amino acid-containing peptide modulators of β-amyloid peptide aggregation)

IT Amyloid
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(β-; D-amino acid-containing peptide modulators of β-amyloid peptide aggregation)

IT Aggregation
(β-amyloid peptide; D-amino acid-containing peptide modulators of β-amyloid peptide aggregation)

IT Amino acids, biological studies
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)
(D-; D-amino acid-containing peptide modulators of β-amyloid peptide aggregation)

IT Drug delivery systems
Pharmacokinetics
(D-amino acid-containing peptide modulators of β-amyloid peptide aggregation)

IT Peptides, biological studies
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(D-amino acid-containing peptide modulators of β-amyloid peptide aggregation)

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204333-66-4P 204333-67-5P 204333-68-6P 204333-69-7P 204333-70-0P
204333-72-2P 204333-75-5P 204333-78-8DP, iodo derivative 204333-78-8P
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365538-53-0P 365538-54-1P 365538-55-2P 365538-56-3P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(D-amino acid-containing peptide modulators of β-amyloid peptide aggregation)

IT **153247-40-6D**, stereoisomer **176390-05-9D**, stereoisomer **176390-09-3D**, stereoisomer 176390-18-4D, amino-terminal modified derivs. 176390-18-4D, stereoisomer 182912-78-3D, amino-terminal modified derivs. 182912-78-3D, stereoisomer 182912-79-4 182912-79-4D, amino-terminal modified derivs. 182912-79-4D, modifying group derivs. 183746-77-2 183746-77-2D, amino-terminal modified derivs. 192699-33-5D, modifying group derivs. 204333-52-8 204333-52-8D, alkyl- and aryl-amide derivs. 204333-52-8D, amino- and carboxyl-terminal modified derivs. 204333-53-9 204333-55-1 204333-57-3 204333-57-3D, alkyl- and aryl-amide derivs. 204333-57-3D, amino- and carboxyl-terminal modified derivs. 204333-73-3 204333-76-6 204333-76-6D, iodo derivative 204333-89-1 204334-05-4 204334-06-5 204334-07-6 204334-10-1 204334-14-5 204334-16-7 **206198-57-4D**, stereoisomer 250370-52-6 250370-52-6D, amino-terminal modified derivs. 250370-61-7D, iodo and modifying group derivs. 250370-62-8D, iodo and modifying group derivs. 250370-63-9 250370-63-9D, amino-terminal modified derivs. 250370-63-9D, modifying group derivs. 250370-68-4 250370-68-4D, amino-terminal modified derivs. 291299-43-9 291299-43-9D, amino-terminal modified derivs. 342877-60-5 342877-60-5D, amino- and carboxyl-terminal modified derivs. 355009-68-6 355009-68-6D, alkyl- and aryl-amide derivs. 355009-68-6D, amino- and carboxyl-terminal modified derivs. 355009-68-6D, modifying group derivs. 355009-69-7 355009-69-7D, alkyl- and aryl-amide derivs. 355009-69-7D, amino- and carboxyl-terminal modified derivs. 355009-70-0 355009-70-0D, alkyl- and aryl-amide derivs. 355009-70-0D, amino- and carboxyl-terminal modified derivs. 355009-70-0D, iodo and alkyl- and aryl-amide derivs. 355009-70-0D, iodo and amino- and carboxyl-terminal modified derivs. 355009-70-0D, iodo derivative 355009-72-2 355009-72-2D, alkyl- and aryl-amide derivs. 355009-72-2D, amino- and carboxyl-terminal modified derivs. 355009-72-2D, iodo and alkyl- and aryl-amide derivs. 355009-72-2D, iodo and amino- and carboxyl-terminal modified derivs. 355009-72-2D, iodo derivative 355009-74-4 355009-74-4D, alkyl- and aryl-amide derivs. 355009-74-4D, amino- and carboxyl-terminal modified derivs. 355009-75-5 355009-75-5D, alkyl- and aryl-amide derivs. 355009-75-5D, amino- and carboxyl-terminal modified derivs. 355009-75-5D, iodo and alkyl- and aryl-amide derivs. 355009-75-5D, iodo and amino- and carboxyl-terminal modified derivs. 355009-75-5D, iodo derivative 355009-77-7 355009-77-7D, alkyl- and aryl-amide derivs. 355009-77-7D, amino- and carboxyl-terminal modified derivs. 355009-77-7D, iodo and alkyl- and aryl-amide derivs. 355009-77-7D, iodo and amino- and carboxyl-terminal modified derivs. 355009-77-7D, iodo derivative 355009-79-9 355009-79-9D, alkyl- and aryl-amide derivs. 355009-79-9D, amino- and carboxyl-terminal modified derivs. 355009-80-2 355009-80-2D, alkyl- and aryl-amide derivs. 355009-80-2D, amino- and carboxyl-terminal modified derivs. 355009-80-2D, modifying group derivs. 355009-81-3 355009-81-3D, alkyl- and aryl-amide derivs. 355009-81-3D, amino- and carboxyl-terminal modified derivs. 355009-82-4 355009-82-4D, alkyl- and aryl-amide derivs. 355009-82-4D, amino- and carboxyl-terminal modified derivs. 355009-83-5 355009-83-5D, alkyl- and aryl-amide derivs. 355009-83-5D, amino- and carboxyl-terminal modified derivs. 355009-84-6 355009-84-6D, alkyl- and aryl-amide derivs. 355009-84-6D, amino- and carboxyl-terminal modified derivs. 355009-85-7 355009-85-7D, alkyl- and aryl-amide derivs. 355009-85-7D, amino- and carboxyl-terminal modified derivs. 355009-86-8 355009-86-8D, alkyl- and aryl-amide derivs. 355009-86-8D, amino- and carboxyl-terminal modified derivs. 355009-87-9 355009-87-9D, alkyl-

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RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(D-amino acid-containing peptide modulators of β-amyloid peptide aggregation)

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RL: BAC (Biological activity or effector, except adverse); BSU (Biological
study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL
(Biological study); USES (Uses)
(D-amino acid-containing peptide modulators of β-amyloid peptide
aggregation)

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RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(D-amino acid-containing peptide modulators of β-amyloid peptide aggregation)

IT **176390-05-9 176390-09-3** 176390-18-4 182912-78-3
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RL: PRP (Properties)
(D-amino acid-containing peptide modulators of β-amyloid peptide aggregation)

RE.CNT 79 THERE ARE 79 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Anon; EP 554887 A1 1993 HCAPLUS
(2) Anon; WO 9304194 1993 HCAPLUS
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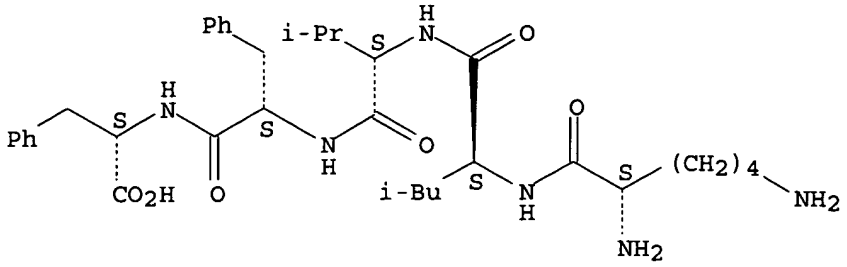
IT **153247-40-6D**, stereoisomer
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(D-amino acid-containing peptide modulators of β-amyloid peptide aggregation)

RN 153247-40-6 HCAPLUS

CN L-Phenylalanine, L-lysyl-L-leucyl-L-valyl-L-phenylalanyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L45 ANSWER 8 OF 30 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2001:526090 HCAPLUS
DN 135:92861
ED Entered STN: 20 Jul 2001
TI Process for the preparation of Nα-2-(4-nitrophenylsulfonyl)ethoxycarbonyl amino acid fluorides
IN Kim, Hack-Joo; Chweh, Weonu; Kim, Young-Cheol
PA Hyundai Pharmaceutical Ind. Co., Ltd., S. Korea
SO PCT Int. Appl., 23 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM C07K005-00
CC 34-3 (Amino Acids, Peptides, and Proteins)
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2001051505	A1	20010719	WO 1999-KR810	19991224 <--

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRAI WO 1999-KR810 19991224 <--
CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2001051505	ICM	C07K005-00
WO 2001051505	ECLA	C07C317/18; C07K001/06A2; C07K001/08D <--

OS CASREACT 135:92861; MARPAT 135:92861
AB Title amino acid fluorides p-O2NC6H4SO2CH2CH2O2CNR1CHR2COF [R1 = H, R2 = H, iso-Pr, 2-methylpropyl, tert-butoxymethyl, benzyl, 2-(tert-butoxycarbonyl)ethyl, 4-(tert-butoxycarbamido)butyl or 4-tert-butoxybenzyl] (Nsc-amino acid fluorides) were prepared by fluorinating Nsc-amino acids with cyanuric fluoride. Thus, 1 mmol Nsc-Val-OH in CH2Cl2 was treated with 3 mmol cyanuric fluoride and 1 mmol dry pyridine under nitrogen for 30 min to afford 82% Nsc-Val-F. The Nsc-amino acids fluorides were applied, without an activation step, to the solid-phase synthesis of peptides Leu-enkephalin, A-VI-5 peptide, and β-amyloid peptide.
ST nitrophenylsulfonylethoxycarbonyl amino acid fluoride prepn peptide coupling
IT Solid phase synthesis
(peptide; preparation of (nitrophenylsulfonyl)ethoxycarbonyl amino acid fluorides)

IT Peptides, preparation
RL: IMF (Industrial manufacture); PREP (Preparation)
(preparation of (nitrophenylsulfonyl)ethoxycarbonyl amino acid fluorides)
IT Amino acids, preparation
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(preparation of (nitrophenylsulfonyl)ethoxycarbonyl amino acid fluorides)
IT 39194-96-2P 58822-25-6P, Leu-enkephalin **153247-40-6P**
RL: IMF (Industrial manufacture); PREP (Preparation)
(preparation of (nitrophenylsulfonyl)ethoxycarbonyl amino acid fluorides)
IT 348621-98-7P 348621-99-8P 348622-00-4P 348622-01-5P 348622-02-6P 348622-03-7P 348622-04-8P 348622-05-9P
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(preparation of (nitrophenylsulfonyl)ethoxycarbonyl amino acid fluorides)
IT 675-14-9, Cyanuric fluoride 35661-40-6D, Fmoc-L-phenylalanine, polyethylene glycol/polystyrene-bound 35661-60-0D, polyethylene glycol/polystyrene-bound 71989-26-9D, polyethylene glycol/polystyrene-bound 160422-18-4 160422-21-9 160422-23-1 160422-25-3 181763-90-6 181763-91-7 181763-93-9 181763-98-4
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of (nitrophenylsulfonyl)ethoxycarbonyl amino acid fluorides)
RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
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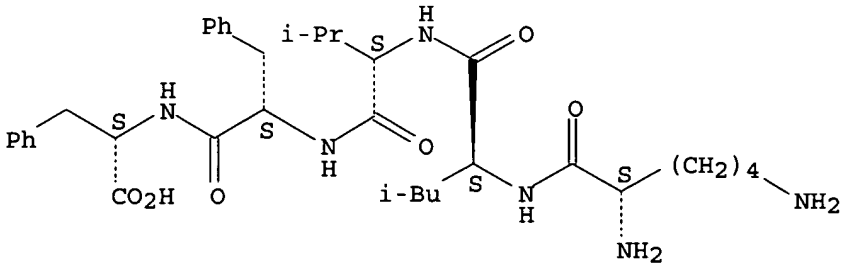
(2) Hyundai Pharm Ind Co Ltd; WO 9817638 A1 1998 HCAPLUS
(3) Vladimir, V; Tetrahedron Letters 1994, V35(42), P7821
IT **153247-40-6P**
RL: IMF (Industrial manufacture); PREP (Preparation)
(preparation of (nitrophenylsulfonyl)ethoxycarbonyl amino acid fluorides)
RN 153247-40-6 HCAPLUS
CN L-Phenylalanine, L-lysyl-L-leucyl-L-valyl-L-phenylalanyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L45 ANSWER 9 OF 30 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2001:416788 HCAPLUS
DN 135:18553
ED Entered STN: 08 Jun 2001
TI Vaccine for the prevention and treatment of Alzheimer's and amyloid related diseases
IN **Chalifour, Robert**; Hebert, Lise; Kong, Xianqi; **Gervais, Francine**
PA **Neurochem, Inc., Can.**
SO PCT Int. Appl., 31 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM A61K039-00

CC 15-2 (Immunochemistry)
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001039796	A2	20010607	WO 2000-CA1413	20001129
	WO 2001039796	A3	20011206		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	CA 2388559	AA	20010607	CA 2000-2388559	20001129
	BR 2000016022	A	20020806	BR 2000-16022	20001129
	EP 1235587	A2	20020904	EP 2000-981111	20001129
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
	JP 2004500354	T2	20040108	JP 2001-541528	20001129
	NO 2002002531	A	20020712	NO 2002-2531	20020528
PRAI	US 1999-168594P	P	19991129		
	US 2000-724842	A	20001128		
	WO 2000-CA1413	W	20001129		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2001039796	ICM	A61K039-00
JP 2004500354	FTERM	4C085/AA03; 4C085/BB11; 4C085/CC32; 4C085/EE06; 4C085/FF02; 4C085/FF13; 4C085/FF14; 4C085/FF19; 4C085/GG02; 4C085/GG03; 4C085/GG04; 4C085/GG08; 4C085/GG10; 4H045/AA10; 4H045/AA30; 4H045/BA01; 4H045/BA11; 4H045/BA12; 4H045/BA13; 4H045/BA14; 4H045/BA18; 4H045/BA19; 4H045/CA40; 4H045/EA31

AB The present invention relates to a stereochem. based "non-self" antigen vaccine for the prevention and/or treatment of Alzheimer's and other amyloid related diseases. The present invention provides a vaccine for the prevention and treatment of Alzheimer's and other amyloid related diseases, which overcomes the drawbacks associated with using naturally occurring peptides, proteins or immunogens.

ST vaccine Alzheimers disease amyloidosis D peptide antibody

IT Peptides, biological studies
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(all-D; vaccine for prevention and treatment of Alzheimer's and amyloid related diseases using all-D peptides that elicit immune response to amyloid protein)

IT Organelle
(fibril; vaccine for prevention and treatment of Alzheimer's and amyloid related diseases using all-D peptides that elicit immune response to amyloid protein)

IT Alzheimer's disease
Amyloidosis
Self-association
Vaccines
(vaccine for prevention and treatment of Alzheimer's and amyloid related diseases using all-D peptides that elicit immune response to amyloid protein)

IT Antibodies
RL: BAC (Biological activity or effector, except adverse); BPN

(Biosynthetic preparation); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(vaccine for prevention and treatment of Alzheimer's and amyloid related diseases using all-D peptides that elicit immune response to amyloid protein)

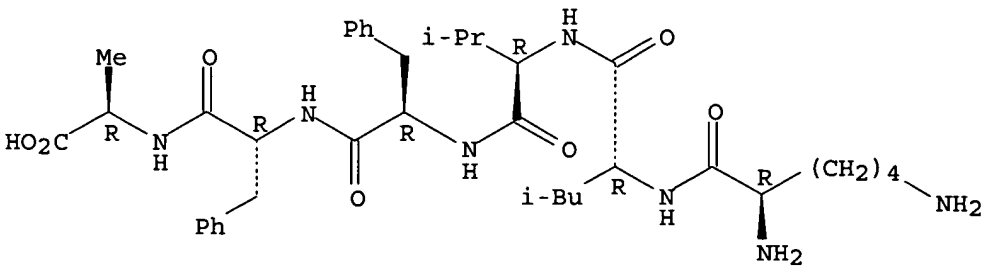
IT Amyloid
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(β-; vaccine for prevention and treatment of Alzheimer's and amyloid related diseases using all-D peptides that elicit immune response to amyloid protein)

IT 165196-29-2P 226707-64-8P 342877-52-5P 342877-53-6P 342877-54-7P
342877-55-8P 342877-56-9P **342877-57-0P**
342877-58-1P 342877-59-2P 342877-60-5P
342877-61-6P 342877-62-7P 342877-63-8P
342877-64-9P 342877-65-0P 342877-66-1P
342877-67-2P 342877-68-3P **342877-69-4P**
342877-70-7P 342877-71-8P 342877-72-9P
342877-73-0P 342877-74-1P 342877-75-2P
342877-76-3P 342877-77-4P 342877-78-5P 342877-79-6P 342877-80-9P
342877-81-0P 342877-82-1P 342877-83-2P 342877-84-3P 342877-85-4P
342877-86-5P 342877-87-6P 342877-88-7P 342877-89-8P 342877-90-1P
342877-91-2P 342877-92-3P 342877-93-4P 342877-94-5P 342877-95-6P
342877-96-7P 342877-97-8P 342877-98-9P 342877-99-0P 342878-00-6P
342878-01-7P 342878-02-8P 342878-03-9P 342878-04-0P 342878-05-1P
342878-06-2P 342878-07-3P 342878-08-4P 342878-09-5P 342878-10-8P
342896-25-7P 342896-48-4P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(vaccine for prevention and treatment of Alzheimer's and amyloid related diseases using all-D peptides that elicit immune response to amyloid protein)

IT **342877-55-8P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(vaccine for prevention and treatment of Alzheimer's and amyloid related diseases using all-D peptides that elicit immune response to amyloid protein)

RN 342877-55-8 HCAPLUS
CN D-Alanine, D-lysyl-D-leucyl-D-valyl-D-phenylalanyl-D-phenylalanyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L45 ANSWER 10 OF 30 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2001:78415 HCAPLUS

DN 134:125971
ED Entered STN: 02 Feb 2001
TI Peptides containing N-substituted D-amino acids for preventing β-strand association
IN Stott, Kelvin
PA UK
SO PCT Int. Appl., 76 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM C07K014-47
ICS A61K038-17; A61P025-28; C07K007-06
CC 1-12 (Pharmacology)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001007474	A1	20010201	WO 2000-GB2923	20000728 <--
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	CA 2379241	AA	20010201	CA 2000-2379241	20000728 <--
	EP 1204679	A1	20020515	EP 2000-949729	20000728 <--
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL				
	JP 2003505470	T2	20030212	JP 2001-512557	20000728 <--
	NZ 516442	A	20031031	NZ 2000-516442	20000728 <--
	AU 767396	B2	20031106	AU 2000-63004	20000728 <--
PRAI	GB 1999-17725	A	19990728 <--		
	WO 2000-GB2923	W	20000728		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2001007474	ICM	C07K014-47
	ICS	A61K038-17; A61P025-28; C07K007-06

AB Chemical compds. and compns. are disclosed which comprise peptides composed of D-enantiomers of amino acids and capable of binding to β-strand structures to form β-sheets, the peptides being selectively Nα-substituted to prevent further β-strand association The peptides are useful for preventing β-strand association The capacity of all-D-[Ac--Leu-MeLeu-Leu-MeLeu-Arg-Arg-NH2] to inhibit aggregation of a synthetic peptide fragment corresponding to residues 11-25 of the Alzheimer Aβ peptide into amyloid fibrils was determined

ST peptide deriv beta strand assocn inhibition; Alzheimer amyloid aggregation inhibition peptide

IT Proteins, general, biological studies
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(aggregation; peptides containing N-substituted D-amino acids for preventing β-strand association)

IT Cytotoxic agents
(conjugates; peptides containing N-substituted D-amino acids for preventing β-strand association)

IT Antibodies
Enzymes, biological studies
Hormones, animal, biological studies
Proteins, specific or class
Transcription factors

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(conjugates; peptides containing N-substituted D-amino acids for preventing β-strand association)

IT Biological transport
(drug; peptides containing N-substituted D-amino acids for preventing β-strand association)

IT Electrostatic force
(electrostatic and other non-covalent interactions; peptides containing N-substituted D-amino acids for preventing β-strand association)

IT Hydrophobicity
(hydrophobic interaction; peptides containing N-substituted D-amino acids for preventing β-strand association)

IT Aggregation
Anti-Alzheimer's agents
Blood-brain barrier
Chromophores
Drug targeting
Fluorescent substances
Hydrogen bond
Immobilization, biochemical
Magnetic materials
Molecular association
Radioactive substances
Spectroscopy
Spin labels
(peptides containing N-substituted D-amino acids for preventing β-strand association)

IT Peptides, biological studies
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(peptides containing N-substituted D-amino acids for preventing β-strand association)

IT Amino acids, biological studies
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)
(peptides containing N-substituted D-amino acids for preventing β-strand association)

IT Amyloid
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(peptides containing N-substituted D-amino acids for preventing β-strand association)

IT Conformation
(protein; peptides containing N-substituted D-amino acids for preventing β-strand association)

IT Amyloid
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(β-; peptides containing N-substituted D-amino acids for preventing β-strand association)

IT Conformation
(β-strand; peptides containing N-substituted D-amino acids for preventing β-strand association)

IT 321909-16-4P
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)
(peptides containing N-substituted D-amino acids for preventing β-strand association)

IT 56-40-6, Glycine, biological studies 56-41-7, L-Alanine, biological studies 56-87-1, L-Lysine, biological studies 60-18-4, L-Tyrosine,

biological studies 61-90-5, L-Leucine, biological studies 63-68-3, L-Methionine, biological studies 63-91-2, L-Phenylalanine, biological studies 71-00-1, L-Histidine, biological studies 72-18-4, L-Valine, biological studies 73-22-3, L-Tryptophan, biological studies 73-32-5, L-Isoleucine, biological studies 74-79-3, L-Arginine, biological studies 147-85-3, L-Proline, biological studies 153-94-6, D-Tryptophan 157-06-2, D-Arginine 312-84-5, D-Serine 319-78-8, D-Isoleucine 328-38-1, D-Leucine 338-69-2, D-Alanine 348-67-4, D-Methionine 351-50-8, D-Histidine 556-02-5, D-Tyrosine 556-02-5D, D-Tyrosine, derivs. 632-20-2, D-Threonine 640-68-6, D-Valine 673-06-3, D-Phenylalanine 673-06-3D, D-Phenylalanine, derivs. 921-01-7, D-Cysteine 923-27-3, D-Lysine 1783-96-6, D-Aspartic acid 2058-58-4, D-Asparagine 2280-48-0, D-β-Hydroxyvaline 5959-95-5, D-Glutamine 6893-26-1, D-Glutamic acid 26782-71-8, D-tert-Leucine
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)
(peptides containing N-substituted D-amino acids for preventing β-strand association)

IT 153247-41-7
RL: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); PROC (Process)
(peptides containing N-substituted D-amino acids for preventing β-strand association)

IT 2564-83-2, TEMPO 3229-53-6, PROXYL 7553-56-2D, Iodine, isotopes, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(peptides containing N-substituted D-amino acids for preventing β-strand association)

IT **153247-40-6** 321985-33-5 321985-34-6
RL: PRP (Properties)
(unclaimed sequence; peptides containing N-substituted D-amino acids for preventing β-strand association)

RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

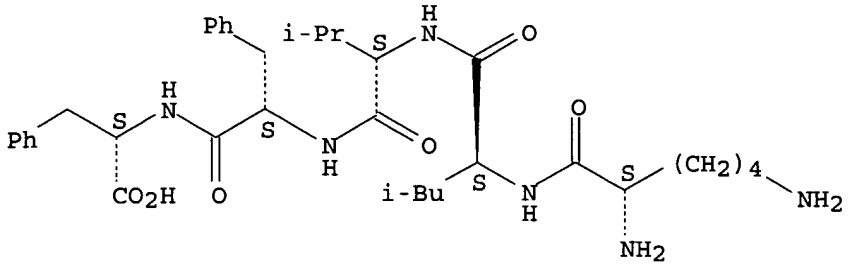
(1) Chitnumsub, P; BIOORGANIC AND MEDICINAL CHEMISTRY 1999, V7(1), P39 HCAPLUS
(2) Doig, A; CHEM COMMUN (CAMBRIDGE) 1997, 22, P2153 HCAPLUS
(3) Findeis, E; BIOCHEMISTRY 1999, V38(21), P6791
(4) Pallitto, M; BIOCHEMISTRY 1999, V38(12), P3570 HCAPLUS
(5) Pharm Peptides Inc; WO 9628471 A 1996 HCAPLUS
(6) Praecis Pharm Inc; WO 0052048 A 2000 HCAPLUS
(7) Texas A & M University Syst; WO 9746547 A 1997 HCAPLUS
(8) Tjernberg, L; JOURNAL OF BIOLOGICAL CHEMISTRY 1997, V272(19), P12601 MEDLINE

IT **153247-40-6**
RL: PRP (Properties)
(unclaimed sequence; peptides containing N-substituted D-amino acids for preventing β-strand association)

RN 153247-40-6 HCAPLUS

CN L-Phenylalanine, L-lysyl-L-leucyl-L-valyl-L-phenylalanyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L45 ANSWER 11 OF 30 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2001:78414 HCAPLUS
DN 134:141772
ED Entered STN: 02 Feb 2001
TI Peptides containing N-substituted L-amino acids for preventing β-strand association
IN Stott, Kelvin
PA UK
SO PCT Int. Appl., 77 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM C07K014-47
ICS A61K038-17; A61P025-28; C07K007-06
CC 1-12 (Pharmacology)
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2001007473	A1	20010201	WO 2000-GB2901	20000728 <--
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2378779	AA	20010201	CA 2000-2378779	20000728 <--
EP 1203019	A1	20020508	EP 2000-948175	20000728 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL				
JP 2003505469	T2	20030212	JP 2001-512556	20000728 <--
AU 766992	B2	20031030	AU 2000-61737	20000728 <--
NZ 516441	A	20031128	NZ 2000-516441	20000728 <--
PRAI GB 1999-17724	A	19990728 <--		
WO 2000-GB2901	W	20000728		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2001007473	ICM	C07K014-47
	ICS	A61K038-17; A61P025-28; C07K007-06

AB Chemical compds. and compns. are disclosed which comprise peptides capable of binding to β-strand structures to form β-sheets, the peptides being selectively Nα-substituted to prevent further β-strand association The peptides are useful for preventing β-strand association The capacity of Ac-Arg-MeArg-Leu-MeLeu-Phe-MePhe-NH2 to inhibit aggregation of a synthetic peptide fragment corresponding to residues 11-25 of the Alzheimer Aβ peptide into amyloid fibrils was determined

ST peptide deriv beta strand assocn inhibition; Alzheimer amyloid aggregation inhibition peptide

IT Proteins, general, biological studies
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(aggregation; peptides containing N-substituted L-amino acids for preventing β-strand association)

IT Cytotoxic agents
(conjugates; peptides containing N-substituted L-amino acids for preventing β-strand association)

IT Antibodies
Enzymes, biological studies
Hormones, animal, biological studies
Proteins, specific or class
Transcription factors
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(conjugates; peptides containing N-substituted L-amino acids for preventing β-strand association)

IT Biological transport
(drug; peptides containing N-substituted L-amino acids for preventing β-strand association)

IT Aggregation
Anti-Alzheimer's agents
Blood-brain barrier
Chromophores
Drug targeting
Fluorescent substances
Immobilization, biochemical
Magnetic materials
Molecular association
Molecular modeling
Radioactive substances
Spectroscopy
Spin labels
(peptides containing N-substituted L-amino acids for preventing β-strand association)

IT Peptides, biological studies
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(peptides containing N-substituted L-amino acids for preventing β-strand association)

IT Amino acids, biological studies
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)
(peptides containing N-substituted L-amino acids for preventing β-strand association)

IT Amyloid
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(peptides containing N-substituted L-amino acids for preventing β-strand association)

IT Conformation
(protein; peptides containing N-substituted L-amino acids for preventing β-strand association)

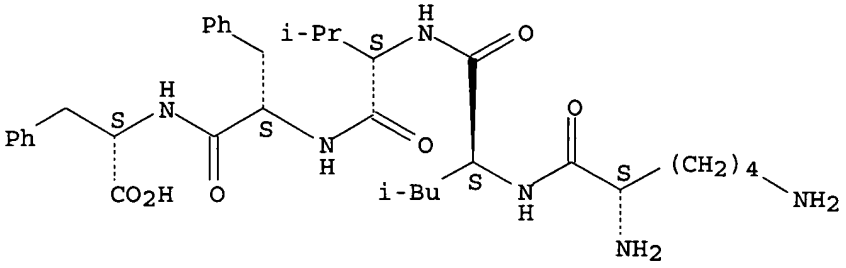
IT Amyloid
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(β-; peptides containing N-substituted L-amino acids for preventing β-strand association)

IT Conformation
(β-strand; peptides containing N-substituted L-amino acids for preventing β-strand association)

IT Amino acids, biological studies
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)
(D-; peptides containing N-substituted L-amino acids for preventing β-strand association)
IT 321909-10-8P
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)
(peptides containing N-substituted L-amino acids for preventing β-strand association)
IT 9001-92-7, Protease
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(peptides containing N-substituted L-amino acids for preventing β-strand association)
IT 52-90-4, L-Cysteine, biological studies 56-40-6, Glycine, biological studies 56-41-7, L-Alanine, biological studies 56-45-1, L-Serine, biological studies 56-84-8, L-Aspartic acid, biological studies 56-85-9, L-Glutamine, biological studies 56-86-0, L-Glutamic acid, biological studies 56-87-1, L-Lysine, biological studies 60-18-4, L-Tyrosine, biological studies 60-18-4D, L-Tyrosine, derivs., biological studies 61-90-5, L-Leucine, biological studies 63-68-3, L-Methionine, biological studies 63-91-2, L-Phenylalanine, biological studies 63-91-2D, L-Phenylalanine, derivs., biological studies 70-47-3, L-Asparagine, biological studies 71-00-1, L-Histidine, biological studies 72-18-4, L-Valine, biological studies 72-19-5, L-Threonine, biological studies 73-22-3, L-Tryptophan, biological studies 73-32-5, L-Isoleucine, biological studies 74-79-3, L-Arginine, biological studies 147-85-3, L-Proline, biological studies 2280-28-6, β-Hydroxyvaline 33105-81-6, tert-Leucine
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)
(peptides containing N-substituted L-amino acids for preventing β-strand association)
IT 153247-41-7
RL: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); PROC (Process)
(peptides containing N-substituted L-amino acids for preventing β-strand association)
IT 2564-83-2, TEMPO 3229-53-6, PROXYL 7553-56-2D, Iodine, isotopes, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(peptides containing N-substituted L-amino acids for preventing β-strand association)
IT 322422-25-3
RL: PRP (Properties)
(unclaimed protein sequence; peptides containing N-substituted L-amino acids for preventing β-strand association)
IT **153247-40-6** 321982-76-7
RL: PRP (Properties)
(unclaimed sequence; peptides containing N-substituted L-amino acids for preventing β-strand association)
RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Chitnumsub, P; BIOORGANIC AND MEDICINAL CHEMISTRY 1999, V7(1), P39 HCAPLUS
(2) Doig, A; CHEM COMMUN (CAMBRIDGE) 1997, 22, P2153 HCAPLUS
(3) Findeis, E; BIOCHEMISTRY 1999, V38(21), P6791
(4) Karolinska Innovations Ab; WO 9721728 A 1997 HCAPLUS
(5) Moehle, K; JOURNAL OF PEPTIDE RESEARCH 1998, V51(1), P19
(6) Pallitto, M; BIOCHEMISTRY 1999, V38(12), P3570 HCAPLUS
(7) Pharm Peptides Inc; WO 9628471 A 1996 HCAPLUS

(8) Texas A & M University Syst; WO 9746547 A 1997 HCAPLUS
IT **153247-40-6**
RL: PRP (Properties)
(unclaimed sequence; peptides containing N-substituted L-amino acids for preventing β-strand association)
RN 153247-40-6 HCAPLUS
CN L-Phenylalanine, L-lysyl-L-leucyl-L-valyl-L-phenylalanyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L45 ANSWER 12 OF 30 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2000:861520 HCAPLUS
DN 134:28433
ED Entered STN: 08 Dec 2000
TI Prevention and treatment of amyloidogenic disease
IN Schenk, Dale B.; Bard, Frederique; Vasquez, Nicki J.; Yednock, Ted
PA Neuralab Limited, Bermuda
SO PCT Int. Appl., 143 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM A61K039-395
ICS A61K038-17; A61K039-39; A61K039-00; G01N033-68; A61K048-00; A61P025-28; C07K016-18; C07K014-47
CC 15-2 (Immunochemistry)
Section cross-reference(s): 8, 63
FAN.CNT 9

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2000072880	A2	20001207	WO 2000-US14810	20000526
WO 2000072880	A3	20010531		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2370311	AA	20001207	CA 2000-2370311	20000526
BR 2000011000	A	20020219	BR 2000-11000	20000526
EP 1185298	A2	20020313	EP 2000-937919	20000526
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
TR 200103447	T2	20020422	TR 2001-200103447	20000526
GB 2368794	A1	20020515	GB 2001-30969	20000526
GB 2368794	B2	20041020		
DE 10084643	T	20020711	DE 2000-10084643	20000526

TR 200202231	T2	20021121	TR 2002-200202231	20000526	
EE 200100626	A	20030217	EE 2001-626	20000526	
JP 2003517461	T2	20030527	JP 2001-511319	20000526	
NZ 515403	A	20040528	NZ 2000-515403	20000526	
US 6710226	B1	20040323	US 2000-723384	20001127	<--
US 6743427	B1	20040601	US 2000-724961	20001128	<--
ZA 2001009487	A	20030217	ZA 2001-9487	20011116	
NO 2001005773	A	20020125	NO 2001-5773	20011127	
BG 106241	A	20020830	BG 2001-106241	20011219	
US 2005009150	A1	20050113	US 2002-232030	20020830	<--
US 2004265308	A1	20041230	US 2004-788666	20040227	<--
US 2004219146	A1	20041104	US 2004-828548	20040419	<--
US 2005013815	A1	20050120	US 2004-923471	20040820	<--
US 2005019330	A1	20050127	US 2004-923469	20040820	<--
US 2005048049	A1	20050303	US 2004-923474	20040820	<--
PRAI US 1999-322289	A2	19990528			
US 1997-67740P	P	19971202	<--		
US 1998-80970P	P	19980407	<--		
US 1998-201430	A2	19981130	<--		
US 2000-580015	A1	20000526			
WO 2000-US14810	W	20000526			
US 2000-723713	A2	20001127			
US 2000-724319	A3	20001127			
US 2000-251892P	P	20001206			
US 2001-10942	A1	20011206			

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES	
WO 2000072880	ICM	A61K039-395	
	ICS	A61K038-17; A61K039-39; A61K039-00; G01N033-68; A61K048-00; A61P025-28; C07K016-18; C07K014-47	
GB 2368794	ECLA	A61K039/00D; A61K039/00D3; C07K014/47A3; C07K016/18	
US 6710226	ECLA	A61K038/17A2; A61K038/19B+M; A61K039/00D3; C07K014/47A3; C07K016/18	<--
US 6743427	ECLA	A61K038/17A2; A61K038/19B+M; A61K039/00D3; C07K014/47A3; C07K016/18	<--
US 2005009150	ECLA	A61K038/17A2; A61K038/19B+M; A61K039/00D3; C07K014/47A3; C07K016/18	<--
US 2004265308	ECLA	A61K038/17A2; A61K038/19B+M; A61K039/00D3; C07K014/47A3; C07K016/18	<--
US 2004219146	ECLA	A61K038/17A2; A61K038/19B+M; A61K039/00D3; C07K014/47A3; C07K016/18	<--
US 2005019330	ECLA	A61K038/17A2; A61K038/19B+M; A61K039/00D3; C07K014/47A3; C07K016/18	<--

AB The invention provides improved agents and methods for treatment of diseases associated with amyloid deposits of Aβ in the brain of a patient. Such methods entail administering agents that induce a beneficial immunogenic response against the amyloid deposit. The methods are useful for prophylactic and therapeutic treatment of Alzheimer's disease. Preferred agents including N-terminal fragments of Aβ and antibodies binding to the same.

ST amyloid beta epitope antibody Alzheimer disease; amyloidogenic disease amyloid precursor protein antibody

IT Phagocytosis
(Fc receptor-mediated; N-terminal fragments of amyloid β and antibodies for prevention and treatment of amyloidogenic disease)

IT Immunoglobulins
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(G1; N-terminal fragments of amyloid β and antibodies for prevention and treatment of amyloidogenic disease)

IT Immunoglobulins
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL

(Biological study); USES (Uses)
(G2; N-terminal fragments of amyloid β and antibodies for prevention and treatment of amyloidogenic disease)

IT Immunoglobulins
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(G3; N-terminal fragments of amyloid β and antibodies for prevention and treatment of amyloidogenic disease)

IT Immunoglobulins
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(G4; N-terminal fragments of amyloid β and antibodies for prevention and treatment of amyloidogenic disease)

IT Alzheimer's disease
Animal tissue
Blood
Down's syndrome
Epitopes
Labels
Mammal (Mammalia)
NMR tomography
Phagocyte
Protein sequences
Susceptibility (genetic)
(N-terminal fragments of amyloid β and antibodies for prevention and treatment of amyloidogenic disease)

IT Immunoglobulin receptors
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(N-terminal fragments of amyloid β and antibodies for prevention and treatment of amyloidogenic disease)

IT Amyloid precursor proteins
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(N-terminal fragments of amyloid β and antibodies for prevention and treatment of amyloidogenic disease)

IT Antigens
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(N-terminal fragments of amyloid β and antibodies for prevention and treatment of amyloidogenic disease)

IT Fusion proteins (chimeric proteins)
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(N-terminal fragments of amyloid β and antibodies for prevention and treatment of amyloidogenic disease)

IT Peptides, biological studies
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(N-terminal fragments of amyloid β and antibodies for prevention and treatment of amyloidogenic disease)

IT Polynucleotides
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(N-terminal fragments of amyloid β and antibodies for prevention and treatment of amyloidogenic disease)

IT Proteins, general, biological studies
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(N-terminal fragments of amyloid β and antibodies for prevention and treatment of amyloidogenic disease)

IT Alums
RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES

(Uses)
(N-terminal fragments of amyloid β and antibodies for prevention and treatment of amyloidogenic disease)

IT Antibodies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(N-terminal fragments of amyloid β and antibodies for prevention and treatment of amyloidogenic disease)

IT Immunostimulants
(adjuvants, Freund's incomplete; N-terminal fragments of amyloid β and antibodies for prevention and treatment of amyloidogenic disease)

IT Immunostimulants
(adjuvants; N-terminal fragments of amyloid β and antibodies for prevention and treatment of amyloidogenic disease)

IT Diagnosis
(agents, kit; N-terminal fragments of amyloid β and antibodies for prevention and treatment of amyloidogenic disease)

IT Brain, disease
Disease, animal
(amyloidogenic; N-terminal fragments of amyloid β and antibodies for prevention and treatment of amyloidogenic disease)

IT Mouse
(antibody; N-terminal fragments of amyloid β and antibodies for prevention and treatment of amyloidogenic disease)

IT Drug delivery systems
(carriers; N-terminal fragments of amyloid β and antibodies for prevention and treatment of amyloidogenic disease)

IT Mental disorder
(cognitive; N-terminal fragments of amyloid β and antibodies for prevention and treatment of amyloidogenic disease)

IT Amyloid
RL: ADV (Adverse effect, including toxicity); BSU (Biological study, unclassified); BIOL (Biological study)
(deposit; N-terminal fragments of amyloid β and antibodies for prevention and treatment of amyloidogenic disease)

IT Test kits
(diagnostic; N-terminal fragments of amyloid β and antibodies for prevention and treatment of amyloidogenic disease)

IT Extracellular matrix
(disease; N-terminal fragments of amyloid β and antibodies for prevention and treatment of amyloidogenic disease)

IT Cognition
(disorder; N-terminal fragments of amyloid β and antibodies for prevention and treatment of amyloidogenic disease)

IT Immunoglobulins
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(fragments; N-terminal fragments of amyloid β and antibodies for prevention and treatment of amyloidogenic disease)

IT Immunoglobulins
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(heavy chains; N-terminal fragments of amyloid β and antibodies for prevention and treatment of amyloidogenic disease)

IT Diagnosis
(immunodiagnosis; N-terminal fragments of amyloid β and antibodies for prevention and treatment of amyloidogenic disease)

IT Drug delivery systems
(injections, i.m.; N-terminal fragments of amyloid β and antibodies for prevention and treatment of amyloidogenic disease)

IT Drug delivery systems
(injections, i.v.; N-terminal fragments of amyloid β and antibodies for prevention and treatment of amyloidogenic disease)

IT Drug delivery systems
(injections, s.c.; N-terminal fragments of amyloid β and

antibodies for prevention and treatment of amyloidogenic disease)
IT Paramagnetic materials
(label; N-terminal fragments of amyloid β and antibodies for prevention and treatment of amyloidogenic disease)
IT Immunoglobulins
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(light chains; N-terminal fragments of amyloid β and antibodies for prevention and treatment of amyloidogenic disease)
IT Antibodies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(monoclonal; N-terminal fragments of amyloid β and antibodies for prevention and treatment of amyloidogenic disease)
IT Lipid A
RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(monophosphates; N-terminal fragments of amyloid β and antibodies for prevention and treatment of amyloidogenic disease)
IT Drug delivery systems
(nasal, intra-; N-terminal fragments of amyloid β and antibodies for prevention and treatment of amyloidogenic disease)
IT Drug delivery systems
(oral; N-terminal fragments of amyloid β and antibodies for prevention and treatment of amyloidogenic disease)
IT Disease, animal
(proliferative; N-terminal fragments of amyloid β and antibodies for prevention and treatment of amyloidogenic disease)
IT Drug delivery systems
(solns., i.p.; N-terminal fragments of amyloid β and antibodies for prevention and treatment of amyloidogenic disease)
IT Drug delivery systems
(sustained-release; N-terminal fragments of amyloid β and antibodies for prevention and treatment of amyloidogenic disease)
IT Infection
Inflammation
Neoplasm
(tissue sample; N-terminal fragments of amyloid β and antibodies for prevention and treatment of amyloidogenic disease)
IT Drug delivery systems
(topical; N-terminal fragments of amyloid β and antibodies for prevention and treatment of amyloidogenic disease)
IT Amyloid
RL: BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(β-; N-terminal fragments of amyloid β and antibodies for prevention and treatment of amyloidogenic disease)
IT 107761-42-2, Glycopeptide (human clone 9-110 amyloid A4 peptide moiety) 118427-80-8 214550-64-8 250741-37-8 268202-35-3 310901-06-5 310901-07-6
RL: BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(N-terminal fragments of amyloid β and antibodies for prevention and treatment of amyloidogenic disease)
IT 141256-04-4, QS-21 310901-08-7 312273-37-3
RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(N-terminal fragments of amyloid β and antibodies for prevention and treatment of amyloidogenic disease)
IT 178949-81-0 214550-60-4 226917-45-9 311818-22-1
RL: PRP (Properties)
(Unclaimed; prevention and treatment of amyloidogenic disease)
IT 109796-61-4 110162-70-4 111750-71-1 118821-52-6 122630-93-7 123232-50-8 126779-13-3 126779-14-4 128124-74-3 144500-61-8

158268-86-1 **176390-00-4** 184951-43-7 190775-13-4
192066-10-7 194097-09-1 218133-82-5 252256-37-4 311818-14-1
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311818-27-6 311818-28-7 311818-29-8 311818-30-1 311818-31-2
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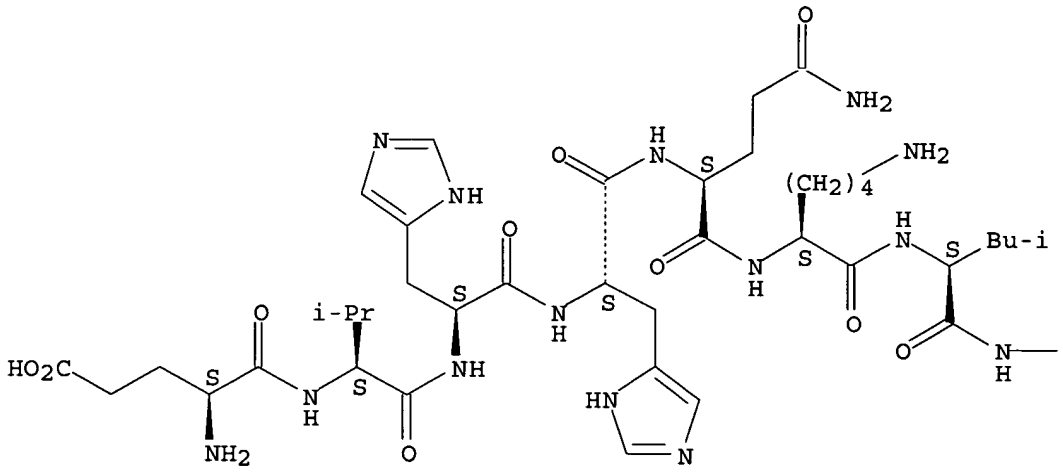
311818-46-9 311818-47-0 311818-48-1 311818-49-2 311818-50-5
311818-51-6 311818-52-7 311818-53-8 311860-14-7 312273-39-5
312273-40-8 312273-41-9 312273-49-7 312273-58-8 312277-40-0
312277-41-1 312277-42-2 312277-43-3 312277-56-8
RL: PRP (Properties)
(unclaimed sequence; prevention and treatment of amyloidogenic disease)

IT **176390-00-4**
RL: PRP (Properties)
(unclaimed sequence; prevention and treatment of amyloidogenic disease)

RN 176390-00-4 HCAPLUS
CN L-Phenylalanine, L-α-glutamyl-L-valyl-L-histidyl-L-histidyl-L-glutaminyl-L-lysyl-L-leucyl-L-valyl-L-phenylalanyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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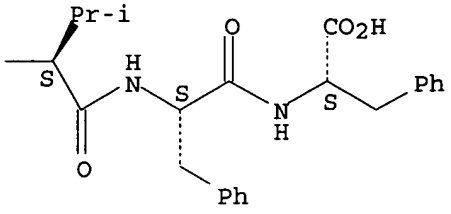


L45 ANSWER 13 OF 30 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2000:814515 HCAPLUS
DN 133:361912
ED Entered STN: 21 Nov 2000
TI Stereoselective antifibrillogenic peptides and peptidomimetics thereof
IN **Chalifour, Robert**; **Gervais, Francine**; **Gupta, Ajay**
PA **Neurochem, Inc., Can.**
SO PCT Int. Appl., 46 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM C07K014-47
ICS A61K038-17; G01N033-68; A61P025-28; C12N005-00; A61K051-00
CC 15-2 (Immunochemistry)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000068263	A2	20001116	WO 2000-CA515	20000504 <--
	WO 2000068263	A3	20010503		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	CA 2388092	AA	20001116	CA 2000-2388092	20000504 <--
	EP 1173480	A2	20020123	EP 2000-926599	20000504 <--
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	JP 2003503312	T2	20030128	JP 2000-616237	20000504 <--
PRAI	US 1999-132592P	P	19990505	<--	
	WO 2000-CA515	W	20000504	<--	

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2000068263	ICM	C07K014-47

ICS A61K038-17; G01N033-68; A61P025-28; C12N005-00; A61K051-00

AB The present invention relates to antifibrillogenic agents for inhibiting amyloidosis and/or for cytoprotection for the treatment of amyloidosis disorders. These agents include peptides, isomers thereof and peptidomimetic compds. thereof. These agents comprise a peptide having a sequence identified from the glycosaminoglycan (GAG) binding region and the prot-prot interaction region of the amyloid protein. The peptide has at least one D-amino acid isomer substitution. The invention also relates to the peptide bound to a label for in vivo imaging of amyloid deposits.

ST antifibrillogenic peptidomimetic amyloid protein amyloidosis; retroinverso peptide antifibrillogenic agent Alzheimer disease

IT Drugs
(antifibrillogenic peptides; stereoselective antifibrillogenic peptides and peptidomimetics)

IT Peptides, biological studies
RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(antifibrillogenic; stereoselective antifibrillogenic peptides and peptidomimetics)

IT Drug delivery systems
(carriers; stereoselective antifibrillogenic peptides and peptidomimetics)

IT Transplant and Transplantation
(cell; stereoselective antifibrillogenic peptides and peptidomimetics)

IT Peptides, biological studies
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(conjugates; stereoselective antifibrillogenic peptides and peptidomimetics)

IT Amyloid
RL: ADV (Adverse effect, including toxicity); BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)
(deposit detection; stereoselective antifibrillogenic peptides and peptidomimetics)

IT Organelle
(fibril, formation inhibition; stereoselective antifibrillogenic peptides and peptidomimetics)

IT Amino acids, biological studies
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(hydrophobic; stereoselective antifibrillogenic peptides and peptidomimetics)

IT Peptides, biological studies
RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(retro-inverso; stereoselective antifibrillogenic peptides and peptidomimetics)

IT Alzheimer's disease
Amyloidosis
Imaging agents
Labels
Mammal (Mammalia)
Peptidomimetics
Protein sequences
(stereoselective antifibrillogenic peptides and peptidomimetics)

IT Animal cell
(transplant; stereoselective antifibrillogenic peptides and peptidomimetics)

IT Amino acids, biological studies
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(D-; stereoselective antifibrillogenic peptides and peptidomimetics)

IT 14133-76-7, Technetium-99, biological studies

RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(label; stereoselective antifibrillogenic peptides and peptidomimetics)

IT 50-99-7, Glucose, biological studies 63-91-2, Phenylalanine, biological studies
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(linker; stereoselective antifibrillogenic peptides and peptidomimetics)

IT 107761-42-2, Glycopeptide (human clone 9-110 amyloid A4 peptide moiety)
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(stereoselective antifibrillogenic peptides and peptidomimetics)

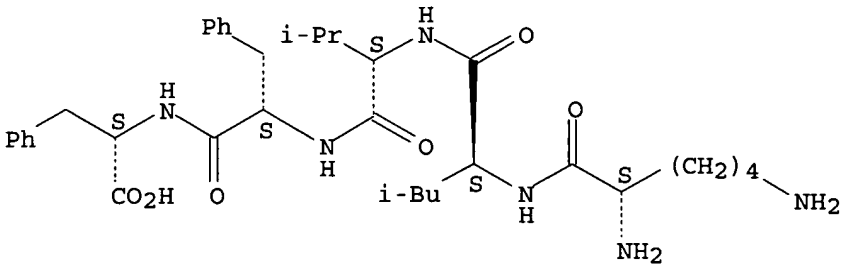
IT **153247-40-6D**, analogs **176390-09-3D**, analogs **176390-19-5D**, analogs 176390-21-9D, analogs **190775-14-5D**, analogs **206198-57-4D**, analogs **307299-71-4D**, analogs **307299-72-5D**, analogs 307299-73-6D, analogs **307299-74-7D**, analogs **307299-75-8D**, analogs **307299-76-9D**, analogs **307299-77-0D**, analogs 307299-78-1D, analogs
RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(stereoselective antifibrillogenic peptides and peptidomimetics)

IT **153247-40-6D**, analogs
RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(stereoselective antifibrillogenic peptides and peptidomimetics)

RN 153247-40-6 HCAPLUS

CN L-Phenylalanine, L-lysyl-L-leucyl-L-valyl-L-phenylalanyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L45 ANSWER 14 OF 30 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2000:96000 HCAPLUS
DN 132:146648
ED Entered STN: 10 Feb 2000
TI Peptide inhibitors of β-amyloid toxicity
IN Kiessling, Laura L.; Murphy, Regina M.
PA Wisconsin Alumni Research Foundation, USA
SO U.S., 15 pp.
CODEN: USXXAM
DT Patent
LA English
IC ICM A61K038-00
NCL 514014000
CC 1-11 (Pharmacology)
Section cross-reference(s): 63

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI US 6022859 A 20000208 US 1997-970833 19971114 <--
PRAI US 1996-30840P P 19961115 <--
CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
US 6022859	ICM	A61K038-00
	NCL	514014000
US 6022859	ECLA	C07K005/10B; C07K014/47A3 <--

AB A β-amyloid inhibitor is disclosed which is of relevance to the treatment of Alzheimer's disease. In one embodiment, this inhibitor comprises a recognition element that interacts specifically with β-amyloid peptide and a disrupting element that alters β-amyloid aggregation. In a preferable form of the present invention, the inhibitor is a peptide.

ST beta amyloid toxicity inhibitor Alzheimer disease

IT Anti-Alzheimer's agents
Cytotoxicity
Protein sequences
(peptide inhibitors of β-amyloid toxicity)

IT Peptides, biological studies
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(peptide inhibitors of β-amyloid toxicity)

IT Peptides, biological studies
RL: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); PROC (Process)
(recognition; peptide inhibitors of β-amyloid toxicity)

IT Amyloid
RL: ADV (Adverse effect, including toxicity); BIOL (Biological study)
(β-; peptide inhibitors of β-amyloid toxicity)

IT **153247-40-6 176390-19-5** 184951-41-5 184951-43-7
184951-45-9 224645-03-8 224645-04-9 224645-06-1 224645-08-3
224645-10-7 257626-11-2
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(peptide inhibitors of β-amyloid toxicity)

RE.CNT 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

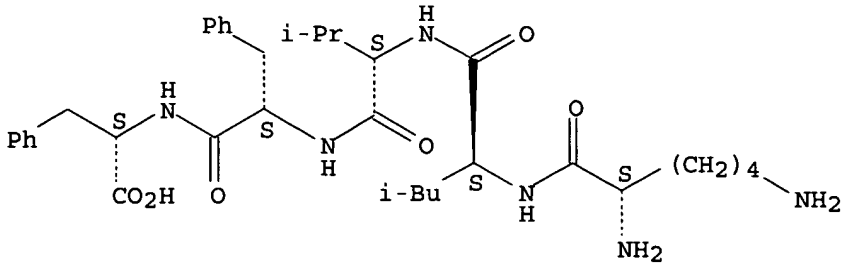
(1) Anon; WO 9425043 1994 HCAPLUS
(2) Anon; WO 9520973 1995 HCAPLUS
(3) Anon; WO 9531210 1995 HCAPLUS
(4) Anon; WO 9628471 1996 HCAPLUS
(5) Dayhoff; Atlas of Protein Sequence and Structure 1972, V5, P89
(6) Ghanta, J; J Biol Chem 1996, V271(47), P29525029528
(7) Hughes; Proc Nat'l Acad Sci USA 1996, V93, P2065 HCAPLUS
(8) Katz; US 5716614 1998 HCAPLUS
(9) Lars, O; J Biol Chem 1996, V271(15), P8545

IT **153247-40-6**
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(peptide inhibitors of β-amyloid toxicity)

RN 153247-40-6 HCAPLUS

CN L-Phenylalanine, L-lysyl-L-leucyl-L-valyl-L-phenylalanyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L45 ANSWER 15 OF 30 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 1999:278142 HCAPLUS
DN 131:110884
ED Entered STN: 06 May 1999
TI Modified-Peptide Inhibitors of Amyloid β-Peptide Polymerization
AU Findeis, Mark A.; Musso, Gary M.; Arico-Muendel, Christopher C.; Benjamin, Howard W.; Hundal, Arvind M.; Lee, Jung-Ja; Chin, Joseph; Kelley, Michael; Wakefield, James; Hayward, Neil J.; Molineaux, Susan M.
CS PRAECIS Pharm. Inc., Cambridge, MA, 02139-1572, USA
SO Biochemistry (**1999**), 38(21), 6791-6800
CODEN: BICHAW; ISSN: 0006-2960
PB American Chemical Society
DT Journal
LA English
CC 1-3 (Pharmacology)
AB Cellular toxicity resulting from nucleation-dependent polymerization of amyloid β-peptide (Aβ) is considered to be a major and possibly the primary component of Alzheimer's disease (AD). Inhibition of Aβ polymerization has thus been identified as a target for the development of therapeutic agents for the treatment of AD. The intrinsic affinity of Aβ for itself suggested that Aβ-specific interactions could be adapted to the development of compds. that would bind to Aβ and prevent it from polymerizing Aβ-derived peptides of fifteen residues were found to be inhibitory of Aβ polymerization The activity of these peptides was subsequently enhanced through modification of their amino termini with specific organic reagents. Addnl. series of compds. prepared to probe structural requirements for activity allowed reduction of the size of the inhibitors and optimization of the Aβ-derived peptide portion to afford a lead compound, cholyl-Leu-Val-Phe-Phe-Ala-OH (PPI-368), with potent polymerization inhibitory activity but limited biochem. stability. The corresponding all-D-amino acyl analog peptide acid (PPI-433) and amide (PPI-457) retained inhibitory activity and were both stable in monkey cerebrospinal fluid for 24 h.
ST amyloid beta polymn inhibitor Alzheimer disease
IT Structure-activity relationship
(anti-Alzheimer's drugs; modified peptide inhibitors of amyloid β-peptide polymerization and stability in monkey CSF)
IT Biological transport
(drug; modified peptide inhibitors of amyloid β-peptide polymerization and stability in monkey CSF)
IT Anti-Alzheimer's agents
Cerebrospinal fluid
(modified peptide inhibitors of amyloid β-peptide polymerization and stability in monkey CSF)
IT Amyloid
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(β-; modified peptide inhibitors of amyloid β-peptide polymerization and stability in monkey CSF)

IT 81-25-4P, Cholic acid 107761-42-2P, Glycopeptide (human clone 9-110 amyloid A4 peptide moiety) 123529-23-7P 131438-79-4P
153247-40-6P 156858-22-9P 183745-73-5P 183745-74-6P
183745-77-9P 183745-81-5P 183745-82-6P 183745-84-8P 183745-86-0P
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183746-44-3P **183746-46-5P 183746-48-7P** 183746-98-7P
183746-99-8P 183747-00-4P 183906-01-6P 183906-03-8P 183906-04-9P
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184051-32-9P 184051-33-0P 204333-43-7P 204333-44-8P 204333-48-2P
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RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(modified peptide inhibitors of amyloid β-peptide polymerization and stability in monkey CSF)

IT 58-85-5, Biotin 114-04-5, Neuraminic acid 1007-01-8, 2-Norbornaneacetic acid 2216-51-5, (-)-Menthol 2321-07-5, Fluorescein 13395-35-2, 2-Iminobiotin 16294-60-3 16629-19-9, 2-Thiophenesulfonyl chloride 35404-50-3 39098-97-0, 2-Thiopheneacetyl chloride 77273-78-0, 4-Thiazolidinecarboxylic acid, 2-oxo-, (S)- 117548-22-8 161171-06-8
RL: RCT (Reactant); RACT (Reactant or reagent)
(modified peptide inhibitors of amyloid β-peptide polymerization and stability in monkey CSF)

RE.CNT 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Alzheimer's Disease and Related Disorders Association Inc; Alzheimer's Disease: Statistics factsheet 1996
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(3) Barrow, C; Science 1991, V253, P179 HCAPLUS
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(21) Mattson, M; Nature 1996, V382, P674 HCAPLUS
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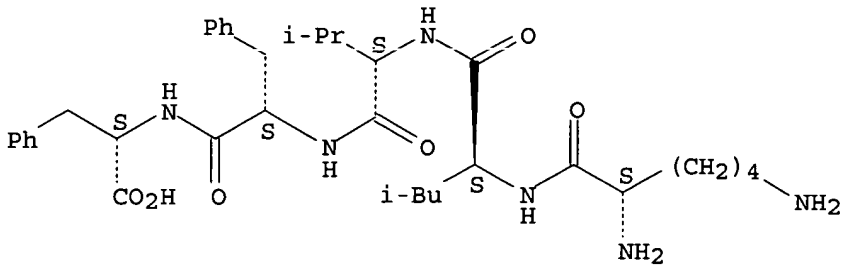
IT **153247-40-6P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(modified peptide inhibitors of amyloid β-peptide polymerization and stability in monkey CSF)
RN 153247-40-6 HCAPLUS
CN L-Phenylalanine, L-lysyl-L-leucyl-L-valyl-L-phenylalanyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L45 ANSWER 16 OF 30 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 1999:166639 HCAPLUS
DN 130:209984
ED Entered STN: 15 Mar 1999
TI Synthesis of cyclosporin A conjugates for treatment of neurological disorders
IN Rich, Daniel H.; Solomon, Michael E.
PA Wisconsin Alumni Research Foundation, USA
SO PCT Int. Appl., 129 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM C07K007-64
ICS A61K038-13
CC 34-3 (Amino Acids, Peptides, and Proteins)
Section cross-reference(s): 1
FAN.CNT 2

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9910374	A1	19990304	WO 1998-US17544	19980825 <--

W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

AU	9892038	A1	19990316	AU 1998-92038	19980825 <--
US	6316405	B1	20011113	US 1999-242724	19990222 <--
PRAI US	1997-57751P	P	19970826 <--		
WO	1998-US17544	W	19980825 <--		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 9910374	ICM	C07K007-64
	ICS	A61K038-13
WO 9910374	ECLA	C07K007/64A <--

OS MARPAT 130:209984

AB Cyclosporin A (CsA) conjugates, cyclo(V-Abu-W-X-Val-X'-Y(Z)-D-Ala-MeLeu-MeLeu-MeVal) [V = MeLeu(3-OH), MeLeu, MeSer, MeSer-PG, MeThr, MeThr-PG, where PG is a side-chain protecting group; W = D-N-Me amino acid or N-methylglycyl residue; X, X' = N-methylleucinyl or N-methylalanyl residue; Y = lysyl, homo-lysyl, ornithinyl, lysyl-PG, homo-lysyl-PG, or ornithinyl-PG residue; Z is a polypeptide comprising 5 or more contiguous residues of Aβ peptide], were prepared for the treatment of neurol. disorders. Thus, the synthesis of Ac-EKLVFF-NH2/[MeLeu(3-OH)1,D-MeAla4,6,Lys7]CsA conjugate is described.

ST cyclosporin A conjugate prepn treatment neurol disorder

IT Nervous system
(disease; synthesis of cyclosporin A conjugates for treatment of neurol. disorders)

IT Peptides, preparation
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(synthesis of cyclosporin A conjugates for treatment of neurol. disorders)

IT 78-84-2, Isobutyraldehyde 100-83-4, 3-Hydroxybenzaldehyde 107-59-5, tert-Butyl chloroacetate 598-21-0, Bromoacetyl bromide 624-83-9, Methyl isocyanate 7693-46-1, p-Nitrophenyl chloroformate 15790-86-0 26250-84-0 28276-08-6, 1,1-Dimethylpropylmagnesium chloride 59865-13-3, Cyclosporin a 90719-32-7 90878-19-6, Phenethylmagnesium chloride 220871-31-8 220903-92-4 220903-96-8 **220904-02-9** 220904-03-0 **220904-04-1** 220904-05-2 220904-06-3 **220904-12-1** 220904-13-2
RL: RCT (Reactant); RACT (Reactant or reagent)
(synthesis of cyclosporin A conjugates for treatment of neurol. disorders)

IT 69143-05-1P 76106-73-5P 82290-66-2P 83602-41-9P 89270-28-0P 124093-26-1P 129549-13-9P 138957-23-0P 152754-55-7P 152754-60-4P 152754-61-5P 152754-62-6P 152754-63-7P 177315-92-3P 178445-79-9P 178446-01-0P 178446-57-6P 220871-18-1P 220871-20-5P 220871-21-6P 220871-22-7P 220871-23-8P 220871-24-9P 220871-25-0P 220871-26-1P 220871-27-2P 220871-28-3P 220871-29-4P 220871-30-7P 220871-32-9P 220871-33-0P 220871-34-1P 220871-35-2P 220871-36-3P 220871-37-4P 220871-38-5P 220871-39-6P 220871-40-9P 220871-41-0P 220871-42-1P 220871-43-2P 220871-44-3P 220871-45-4P 220871-46-5P 220871-47-6P 220871-48-7P 220903-93-5P 220903-94-6P 220903-95-7P 220903-97-9P 220903-98-0P 220903-99-1P 220904-00-7P 220904-01-8P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(synthesis of cyclosporin A conjugates for treatment of neurol. disorders)

IT 104324-15-4P 220871-19-2P 220871-49-8P
RL: SPN (Synthetic preparation); PREP (Preparation)
(synthesis of cyclosporin A conjugates for treatment of neurol. disorders)

IT 220904-07-4P 220904-08-5P 220904-09-6P 220904-10-9P 220904-11-0P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(synthesis of cyclosporin A conjugates for treatment of neurol. disorders)

RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

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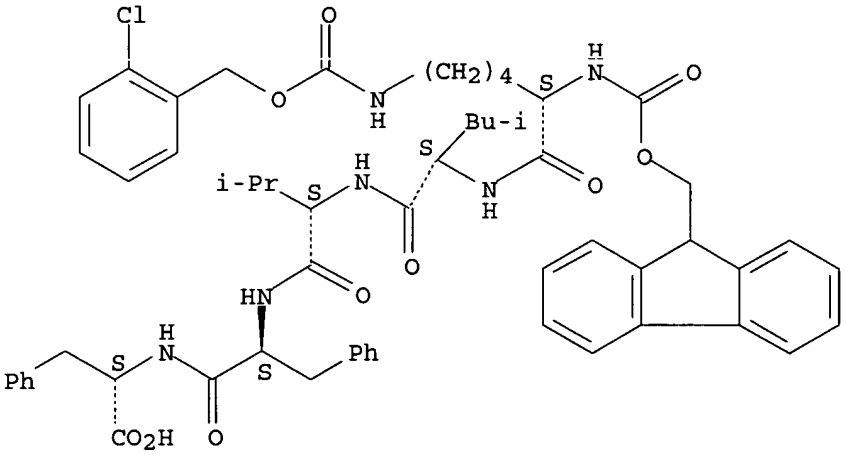
IT **220904-02-9**
RL: RCT (Reactant); RACT (Reactant or reagent)
(synthesis of cyclosporin A conjugates for treatment of neurol. disorders)

RN 220904-02-9 HCAPLUS

CN L-Phenylalanine, N6-[[(2-chlorophenyl)methoxy]carbonyl]-N2-[(9H-fluoren-9-ylmethoxy)carbonyl]-L-lysyl-L-leucyl-L-valyl-L-phenylalanyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L45 ANSWER 17 OF 30 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 1999:148185 HCAPLUS

DN 130:347290

ED Entered STN: 09 Mar 1999

TI Recognition sequence design for peptidyl modulators of β-amyloid aggregation and toxicity

AU Pallitto, Monica M.; Ghanta, Jyothi; Heinzelman, Peter; Kiessling, Laura L.; Murphy, Regina M.

CS Departments of Chemical Engineering and Chemistry, University of Wisconsin, Madison, WI, 53706, USA

SO Biochemistry (**1999**), 38(12), 3570-3578
CODEN: BICHAW; ISSN: 0006-2960

PB American Chemical Society

DT Journal

LA English

CC 1-11 (Pharmacology)

AB β-Amyloid (Aβ), the primary protein component of Alzheimer's plaques, is neurotoxic when aggregated into fibrils. We have devised a modular strategy for generating compds. that inhibit Aβ toxicity,

based on linking a recognition element for Aβ to a disrupting element designed to interfere with Aβ aggregation. One such compound, with the 15-25 sequence of Aβ as the recognition element and a lysine hexamer as the disrupting element, altered Aβ aggregation kinetics and protected cells from Aβ toxicity [Ghanta et al. (1996) J. Biol. Chemical 271, 29525]. To optimize the recognition element, peptides of 4-8 residues composed of overlapping sequences within the 15-25 domain were synthesized, along with hybrid compds. containing those recognition sequences coupled to a lysine hexamer. None of the recognition peptides altered Aβ aggregation kinetics and only two, KLVFF and KLVF, had any protective effect against Aβ toxicity. The hybrid peptide KLVFF-KKKKKK dramatically altered Aβ aggregation kinetics and aggregate morphol. and provided significantly improved protection against Aβ toxicity compared to the recognition peptide alone. In contrast, FAEDVG-KKKKKK possessed only modest inhibitory activity and had no marked effect on Aβ aggregation. The scrambled sequence VLFKF was nearly as effective a recognition domain as KLVFF, suggesting the hydrophobic characteristics of the recognition sequence are critical None of the cytoprotective peptides prevented Aβ aggregation; rather, they increased aggregate size and altered aggregate morphol. These results suggest that coupling recognition with disrupting elements is an effective generalizable strategy for the creation of Aβ inhibitors. Significantly, prevention of Aβ aggregation may not be required for prevention of toxicity.

ST beta amyloid aggregation inhibitor recognition peptide Alzheimer

IT Alzheimer's disease
Cytotoxicity
Drug design
Hydrophobicity
Molecular recognition
(recognition sequence design for peptidyl modulators of β-amyloid aggregation and toxicity)

IT Amyloid precursor proteins
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(recognition sequence design for peptidyl modulators of β-amyloid aggregation and toxicity)

IT Amyloid
RL: ADV (Adverse effect, including toxicity); BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); PROC (Process)
(β-; recognition sequence design for peptidyl modulators of β-amyloid aggregation and toxicity)

IT Peptides, biological studies
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(β-amyloid inhibitors; recognition sequence design for peptidyl modulators of β-amyloid aggregation and toxicity)

IT **153247-40-6P** 176390-18-4P **176390-19-5P** 184951-41-5P
184951-43-7P 224645-03-8P 224645-04-9P 224645-06-1P
224645-07-2P 224645-08-3P 224645-09-4P 224645-10-7P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(recognition sequence design for peptidyl modulators of β-amyloid aggregation and toxicity)

RE.CNT 51 THERE ARE 51 CITED REFERENCES AVAILABLE FOR THIS RECORD

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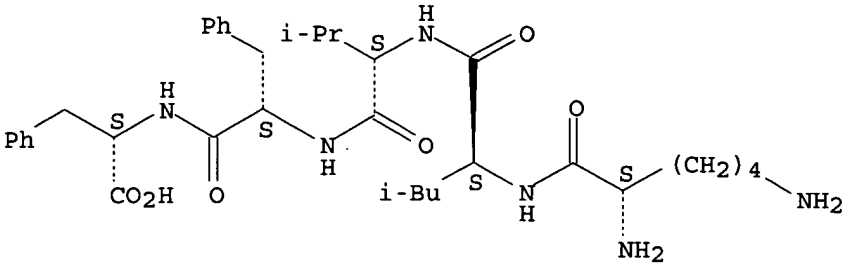
IT **153247-40-6P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(recognition sequence design for peptidyl modulators of β-amyloid aggregation and toxicity)

RN 153247-40-6 HCAPLUS

CN L-Phenylalanine, L-lysyl-L-leucyl-L-valyl-L-phenylalanyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L45 ANSWER 18 OF 30 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 1999:21679 HCAPLUS
DN 130:95847
ED Entered STN: 12 Jan 1999
TI Preparation of amyloid β peptides and derivatives that modulate β-amyloid aggregation
IN Findeis, Mark A.; Benjamin, Howard; Garnick, Marc B.; Gefter, Malcolm L.; Hundal, Arvind; Kasman, Laura; Musso, Gary; Signer, Ethan R.; Wakefield, James; Reed, Michael; Molineaux, Susan; Kubasek, William; Chin, Joseph; Lee, Jung-Ja; Kelley, Michael
PA Praecis Pharmaceuticals, Inc., USA
SO U.S., 52 pp., Cont.-in-part of U.S. Ser. No. 404,831.
CODEN: USXXAM
DT Patent
LA English
IC ICM C07K014-435
ICS C07K007-08
NCL 514002000
CC 34-3 (Amino Acids, Peptides, and Proteins)
Section cross-reference(s): 1
FAN.CNT 7

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
PI	US 5854204	A	19981229	US 1996-612785	19960314	<--
	US 5817626	A	19981006	US 1995-404831	19950314	<--
	US 5854215	A	19981229	US 1995-475579	19950607	<--
	AU 759036	B2	20030403	AU 2000-35389	20000519	<--
	AU 769915	B2	20040212	AU 2002-15539	20020211	<--
PRAI	US 1995-404831	A2	19950314	<--		
	US 1995-475579	A2	19950607	<--		
	US 1995-548998	A2	19951027	<--		
	AU 1996-52524	A3	19960314	<--		
	AU 1997-42387	A3	19970827	<--		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES	
US 5854204	ICM	C07K014-435	
	ICS	C07K007-08	
	NCL	514002000	
US 5854204	ECLA	C07K014/47A3	<--
US 5817626	ECLA	C07K014/47A3	<--
US 5854215	ECLA	C07K014/47A3	<--

AB Compds. that modulate the aggregation of amyloidogenic proteins or peptides are disclosed. The modulators of the invention can promote amyloid aggregation or, more preferably, can inhibit natural amyloid aggregation. In a preferred embodiment, the compds. modulate the aggregation of natural β amyloid peptides (β-AP). In a preferred embodiment, the β amyloid modulator compds. of the invention are comprised of an Aβ aggregation core domain and a

modifying group coupled thereto such that the compound alters the aggregation or inhibits the neurotoxicity of natural β amyloid peptides when contacted with the peptides. Furthermore, the modulators are capable of altering natural β-AP aggregation when the natural β-APs are in a molar excess amount relative to the modulators. Pharmaceutical compns. comprising the compds. of the invention, and diagnostic and treatment methods for amyloidogenic diseases using the compds. of the invention, are also disclosed.

ST amyloid peptide aggregation inhibitor prepn Alzheimer treatment

IT Amyloidosis
Anti-Alzheimer's agents
(preparation of amyloid β peptides and derivs. that modulate β-amyloid aggregation)

IT Amyloid
RL: BSU (Biological study, unclassified); MSC (Miscellaneous); BIOL (Biological study)
(β-; preparation of amyloid β peptides and derivs. that modulate β-amyloid aggregation)

IT 81-25-4, Cholic acid
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); THU (Therapeutic use); BIOL (Biological study); RACT (Reactant or reagent); USES (Uses)
(preparation of amyloid β peptides and derivs. that modulate β-amyloid aggregation)

IT 123529-23-7P **153247-40-6P** 156858-22-9P 182912-78-3P
183745-73-5P 183745-74-6P 183745-77-9P 183745-79-1P 183745-81-5P
183745-82-6P 183745-84-8P 183745-86-0P 183745-88-2P 183745-90-6P
183745-92-8P 183746-04-5P 183746-05-6P 183746-07-8P 183746-08-9P
183746-09-0P 183746-10-3P 183746-11-4P 183746-12-5P 183746-13-6P
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183746-30-7P 183746-31-8P 183746-33-0P 183746-36-3P
183746-42-1P 183746-44-3P **183746-48-7P 183746-50-1P**
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183746-69-2P 183746-71-6P 183746-73-8P 183746-75-0P 183746-77-2P
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219127-35-2P 219127-36-3P 219127-38-5P 219127-40-9P 219127-41-0P
219127-42-1P **219127-44-3P** 219127-49-8P **219127-50-1P**
219127-52-3P 219127-55-6P 219127-56-7P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of amyloid β peptides and derivs. that modulate β-amyloid aggregation)

RE.CNT 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Anon; EP 554887 A1 1993 HCAPLUS
(2) Anon; WO 9304194 1993 HCAPLUS
(3) Anon; WO 9428412 1994 HCAPLUS
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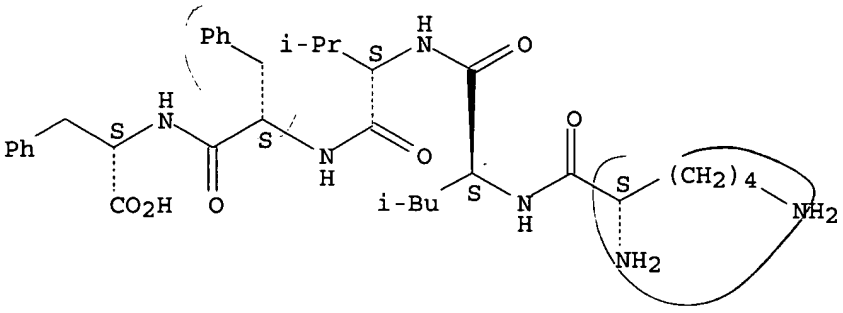
(23) Potter; US 5338663 1994 HCAPLUS
(24) Roberts; US 5470951 1995 HCAPLUS

IT **153247-40-6P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of amyloid β peptides and derivs. that modulate β-amyloid aggregation)
RN 153247-40-6 HCAPLUS
CN L-Phenylalanine, L-lysyl-L-leucyl-L-valyl-L-phenylalanyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



lys-leu-Val-phe-phe
5854204
SEQ ID NO: 9
7, 8, 10

L45 ANSWER 19 OF 30 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 1998:197424 HCAPLUS
DN 128:266268
ED Entered STN: 06 Apr 1998
TI Identification of agents that protect against inflammatory injury to neurons
IN Giulian, Dana J.
PA Baylor College of Medicine, USA; Giulian, Dana J.
SO PCT Int. Appl., 149 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM A61K049-00
ICS G01N031-00; G01N033-48; G01N033-53; G01N033-567; G01N033-569
CC 1-11 (Pharmacology)
Section cross-reference(s): 63
FAN.CNT 2

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9811923	A1	19980326	WO 1997-US16999	19970919 <--
W: AU, CA, JP, US, US				

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        RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
     US 6071493          A     20000606    US 1996-717551          19960920 <--
     US 6043283          A     20000328    US 1997-870967          19970606 <--
     CA 2265896          AA    19980326    CA 1997-2265896         19970919 <--
     AU 9745894          A1    19980414    AU 1997-45894           19970919 <--
     AU 738509           B2    20010920
     EP 1051195          A1    20001115    EP 1997-944385          19970919 <--
        R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, FI
     JP 2002504988       T2    20020212    JP 1998-514998          19970919 <--
PRAI US 1996-717551      A2    19960920  <--
     US 1997-870967      A2    19970606  <--
     WO 1997-US16999     W     19970919  <--
CLASS
 PATENT NO.      CLASS  PATENT FAMILY CLASSIFICATION CODES
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 WO 9811923      ICM    A61K049-00
                 ICS    G01N031-00; G01N033-48; G01N033-53; G01N033-567;
                        G01N033-569
 WO 9811923      ECLA   A61K051/04; G01N033/50D2; G01N033/68V2              <--
 US 6071493      ECLA   A61K051/04; G01N033/50D2; G01N033/68V2              <--
 US 6043283      ECLA   A61K051/04; G01N033/50D2; G01N033/68V2              <--
OS   MARPAT 128:266268
AB   Methods are disclosed for identifying agents that inhibit the toxic
     effects of neurotoxins on neurons from plaque component-activated
     mononuclear phagocytes.  Also disclosed are methods for identifying agents
     that inhibit mononuclear phagocyte-plaque component complex formation,
     plaque component activation of mononuclear phagocytes, and plaque
     component-induced neurotoxicity of mononuclear phagocytes.  The invention
     is also directed to agents and pharmaceutical compns. obtained by the
     identification methods described.  Addnl., the invention describes methods
     for using tyramine compds. to inhibit the toxic effects of neurotoxins and
     methods to treat and diagnose neurodegenerative diseases and disorders.
ST   neuron inflammatory injury neuroprotectant identification; mononuclear
     phagocyte plaque component neurotoxicity neuroprotection;
     neurodegenerative disease diagnosis therapeutic; tyramine compd
     neuroprotectant
IT   Apolipoproteins
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (A; identification of agents that protect against inflammatory injury
        to neurons)
IT   AIDS (disease)
     AIDS (disease)
        (AIDS dementia complex; identification of agents that protect against
        inflammatory injury to neurons)
IT   Mental disorder
     Mental disorder
        (AIDS dementia; identification of agents that protect against
        inflammatory injury to neurons)
IT   Brain, disease
     Prion diseases
        (Creutzfeldt-Jakob, plaque component from; identification of agents
        that protect against inflammatory injury to neurons)
IT   Apolipoproteins
     RL: BPR (Biological process); BSU (Biological study, unclassified); PUR
     (Purification or recovery); BIOL (Biological study); PREP (Preparation);
     PROC (Process)
        (E; identification of agents that protect against inflammatory injury
        to neurons)
IT   Apolipoproteins
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
```

(Lp(a); identification of agents that protect against inflammatory injury to neurons)
IT Glutamate receptors
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(NMDA-binding; identification of agents that protect against inflammatory injury to neurons)
IT mRNA
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(Scavenger receptor II; identification of agents that protect against inflammatory injury to neurons)
IT Phenols, biological studies
Phenols, biological studies
RL: ADV (Adverse effect, including toxicity); BIOL (Biological study)
(amino; identification of agents that protect against inflammatory injury to neurons)
IT Brain, disease
(amyloid angiopathy, plaque component from; identification of agents that protect against inflammatory injury to neurons)
IT Nervous system
(amyotrophic lateral sclerosis, plaque component from; identification of agents that protect against inflammatory injury to neurons)
IT Macrophage
(and macrophage precursor cells and macrophage-like cells; identification of agents that protect against inflammatory injury to neurons)
IT Monocyte
(and monocyte precursor cells and monocyte-like cells; identification of agents that protect against inflammatory injury to neurons)
IT Nucleic acids
RL: BPR (Biological process); BSU (Biological study, unclassified); MFM (Metabolic formation); BIOL (Biological study); FORM (Formation, nonpreparative); PROC (Process)
(biosynthesis; identification of agents that protect against inflammatory injury to neurons)
IT Cat (Felis catus)
Dog (Canis familiaris)
Guinea pig (Cavia porcellus)
Primate
Rabbit
Rodent
Swine
(brain; identification of agents that protect against inflammatory injury to neurons)
IT Nerve, disease
(death; identification of agents that protect against inflammatory injury to neurons)
IT Nervous system
(degeneration; identification of agents that protect against inflammatory injury to neurons)
IT Amyloidosis
(hereditary, cerebral hemorrhage type, Dutch type, plaque component from; identification of agents that protect against inflammatory injury to neurons)
IT Brain
(hippocampus; identification of agents that protect against inflammatory injury to neurons)
IT Anti-Alzheimer's agents
Antiparkinsonian agents
Astrocyte
Brain
Cell morphology

Drug delivery systems
Drug screening
Nucleic acid amplification (method)
Structure-activity relationship
Translation, genetic
(identification of agents that protect against inflammatory injury to neurons)

IT Peptides, biological studies
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(identification of agents that protect against inflammatory injury to neurons)

IT Glycoproteins, general, biological studies
RL: BPR (Biological process); BSU (Biological study, unclassified); PUR (Purification or recovery); BIOL (Biological study); PREP (Preparation); PROC (Process)
(identification of agents that protect against inflammatory injury to neurons)

IT Human immunodeficiency virus 1
(infection; identification of agents that protect against inflammatory injury to neurons)

IT Signal transduction, biological
(inhibitors; identification of agents that protect against inflammatory injury to neurons)

IT Nerve, disease
(injury; identification of agents that protect against inflammatory injury to neurons)

IT Lipoproteins
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(low-d., acetylated, saporin conjugates; identification of agents that protect against inflammatory injury to neurons)

IT Ion channel
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(membrane ion gradients; identification of agents that protect against inflammatory injury to neurons)

IT Metabolism
(metabolic function loss; identification of agents that protect against inflammatory injury to neurons)

IT Neuroglia
(microglia, and microglia precursor cells and microglia-like cells; identification of agents that protect against inflammatory injury to neurons)

IT Respiration, animal
(mitochondrial; identification of agents that protect against inflammatory injury to neurons)

IT Liposomes
Microspheres
(mononuclear phagocyte or plaque component adhered to; identification of agents that protect against inflammatory injury to neurons)

IT Cytokines
Enzymes, biological studies
Lipoproteins
Proteins, general, biological studies
Radicals, biological studies
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(mononuclear phagocyte release of; identification of agents that protect against inflammatory injury to neurons)

IT Imaging
(mononuclear phagocyte-plaque component complex; identification of

agents that protect against inflammatory injury to neurons)
IT Phagocyte
(mononuclear, plaque component complex formation; identification of agents that protect against inflammatory injury to neurons)
IT Cell death
Nerve
(neuron; identification of agents that protect against inflammatory injury to neurons)
IT Cytoprotective agents
(neuroprotectants; identification of agents that protect against inflammatory injury to neurons)
IT Toxicity
(neurotoxicity; identification of agents that protect against inflammatory injury to neurons)
IT Toxins
RL: ADV (Adverse effect, including toxicity); PUR (Purification or recovery); BIOL (Biological study); PREP (Preparation)
(neurotoxins; identification of agents that protect against inflammatory injury to neurons)
IT Dyes
(penetration; identification of agents that protect against inflammatory injury to neurons)
IT Amines, biological studies
Amines, biological studies
RL: ADV (Adverse effect, including toxicity); BIOL (Biological study)
(phenolic; identification of agents that protect against inflammatory injury to neurons)
IT Human immunodeficiency virus
(plaque component from infection with; identification of agents that protect against inflammatory injury to neurons)
IT Alzheimer's disease
Down's syndrome
Multiple sclerosis
Parkinson's disease
(plaque component from; identification of agents that protect against inflammatory injury to neurons)
IT Proteins, specific or class
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); PRP (Properties); PUR (Purification or recovery); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation)
(plaque; identification of agents that protect against inflammatory injury to neurons)
IT Mitochondria
(respiration; identification of agents that protect against inflammatory injury to neurons)
IT Proteins, specific or class
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(saporins, conjugates, with acetylated LDL; identification of agents that protect against inflammatory injury to neurons)
IT Brain, disease
(senile plaque; identification of agents that protect against inflammatory injury to neurons)
IT Brain, disease
(spongiform encephalopathy, plaque component from; identification of agents that protect against inflammatory injury to neurons)
IT Brain, disease
(stroke, plaque component from; identification of agents that protect against inflammatory injury to neurons)
IT Antigens
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(surface; identification of agents that protect against inflammatory

injury to neurons)
IT Nerve
(toxicity; identification of agents that protect against inflammatory injury to neurons)
IT Injury
(trauma, plaque component from; identification of agents that protect against inflammatory injury to neurons)
IT Scavenger receptors
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(type II; identification of agents that protect against inflammatory injury to neurons)
IT Drug delivery systems
(unit doses; identification of agents that protect against inflammatory injury to neurons)
IT Amyloid
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(β-; identification of agents that protect against inflammatory injury to neurons)
IT 89-00-9, Quinolinic acid 77006-27-0
RL: ADV (Adverse effect, including toxicity); BIOL (Biological study)
(identification of agents that protect against inflammatory injury to neurons)
IT 107015-83-8 107761-42-2, Glycopeptide (human clone 9-110 amyloid A4 peptide moiety) 107761-42-2D, Glycopeptide (human clone 9-110 amyloid A4 peptide moiety), modified 109770-29-8, 1-28-Glycopeptide (human clone 9-110 amyloid A4 peptide moiety) 118427-80-8 131438-79-4 131580-10-4 131602-53-4 133605-53-5 144409-98-3 146621-55-8 152286-31-2 155178-13-5D, carboxyl-terminal variants **176390-02-6** 176390-21-9 190436-05-6 205437-69-0 205437-73-6 205454-00-8
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)
(identification of agents that protect against inflammatory injury to neurons)
IT 50-02-2, Dexamethasone 51-61-6, Dopamine, biological studies 51-67-2, Tyramine 51-67-2D, Tyramine, derivs. 53-86-1, Indomethacin 54-05-7, Chloroquine 54-05-7D, Chloroquine, derivs. 60-18-4, Tyrosine, biological studies 64-86-8, Colchicine 70-18-8, Glutathione, biological studies 104-14-3, Octopamine 145-63-1, Suramine 446-72-0, Genistein 477-84-9, Damnacanthal 556-02-5, D-Tyrosine 949-67-7, L-Tyrosine ethyl ester 1080-06-4, L-Tyrosine methyl ester 1406-18-4, Vitamin E 4357-95-3, L-Tyrosine β-naphthylamide 6292-90-6, L-Tyrosine butyl ester 6384-92-5, NMDA 7662-51-3, L-Tyrosine hydrazide 9001-05-2, Catalase 10182-84-0, Diphenyl iodonium 16874-12-7, L-Tyrosine tert-butyl ester 16874-12-7D, Tyrosine tert-butyl ester, mono- and di-iodinated 23210-56-2, Ifenprodil 42406-77-9, L-Tyrosine benzyl ester 76326-31-3, AP5 77086-22-7, MK801 85797-13-3, AP7 90237-02-8, GAMS 118876-58-7 125441-04-5, L-Tyrosine allyl ester 125441-05-6 150403-88-6 154447-36-6, LY294002
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(identification of agents that protect against inflammatory injury to neurons)
IT 9001-92-7, Protease 9005-49-6, Heparin sulfate, biological studies 9050-30-0, Heparan sulfate
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(identification of agents that protect against inflammatory injury to neurons)
IT 141176-92-3P
RL: PUR (Purification or recovery); PREP (Preparation)

(identification of agents that protect against inflammatory injury to neurons)
IT 72-57-1, Trypan blue
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(identification of agents that protect against inflammatory injury to neurons)
IT 80449-02-1, Tyrosine kinase
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(inhibitors; identification of agents that protect against inflammatory injury to neurons)
IT 50-99-7, Glucose, biological studies
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(metabolism; identification of agents that protect against inflammatory injury to neurons)
IT 9012-36-6, Sepharose 9014-76-0, Sephadex
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(mononuclear phagocyte or plaque component adhered to; identification of agents that protect against inflammatory injury to neurons)
IT 10102-43-9, Nitric oxide, biological studies
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(mononuclear phagocyte release of; identification of agents that protect against inflammatory injury to neurons)
IT 56-65-5, Adenosine triphosphate, biological studies
RL: BPR (Biological process); BSU (Biological study, unclassified); MFM (Metabolic formation); BIOL (Biological study); FORM (Formation, nonpreparative); PROC (Process)
(production; identification of agents that protect against inflammatory injury to neurons)
IT 141256-43-1, Antichymotrypsin
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(α-; identification of agents that protect against inflammatory injury to neurons)
RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Eikelenboom; Virchows Archiv 1991, V60(5), P329 MEDLINE
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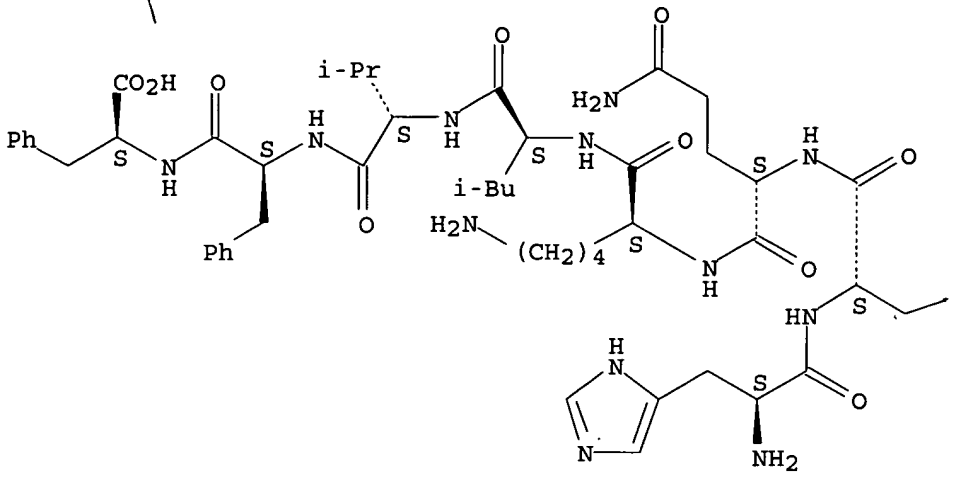
(3) Siripont; Cellular Immunology 1988, V117(2), P239 HCAPLUS
IT **176390-02-6**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)
(identification of agents that protect against inflammatory injury to neurons)
RN 176390-02-6 HCAPLUS
CN L-Phenylalanine, L-histidyl-L-histidyl-L-glutaminyl-L-lysyl-L-leucyl-L-valyl-L-phenylalanyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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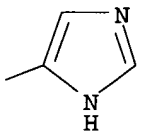

L45 ANSWER 20 OF 30 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 1998:137096 HCAPLUS
DN 128:305262
ED Entered STN: 09 Mar 1998
TI Measurement of peptide aggregation with pulsed-field gradient nuclear magnetic resonance spectroscopy
AU Mansfield, Shawn L.; Jayawickrama, Dimuthu A.; Timmons, Jeffery S.; Larive, Cynthia K.
CS Department of Chemistry, University of Kansas, Lawrence, KS, 66045, USA
SO Biochimica et Biophysica Acta (**1998**), 1382(2), 257-265
CODEN: BBACAQ; ISSN: 0006-3002
PB Elsevier Science B.V.
DT Journal
LA English
CC 6-3 (General Biochemistry)
AB Interactions between hydrophobic patches in proteins are often a driving force for denaturation and aggregation. The aggregation of the β-amyloid peptide fragment, VHHQKLVFFAEDVGSNK (β(12-28)), has been investigated in aqueous solution at low pH. This peptide contains a central hydrophobic patch spanning residues 17-21. Diffusion coeffs. measured with pulsed-field gradient NMR as a function of peptide solution concentration were

used to assess the extent of aggregation. Following the hypothesis that hydrophobic interactions are an important driving force in the aggregation of this peptide at low pH, a non-aggregating analog of the β(12-28) peptide, [Gly19,20]β(12-28) was synthesized. In the [Gly19,20]β(12-28) peptide, the replacement of the two phenylalanine residues disrupts the hydrophobic interactions which drive the aggregation of β(12-28). The diffusion coefficient of the [Gly19,20]β(12-28) peptide is invariant over the concentration range studied and provides a good estimate of the monomeric diffusion coefficient of β(12-28). A second peptide analog was synthesized in which the phenylalanine at position 20 was replaced with a cysteine residue. The disulfide-linked dimer, ([Cys20]β(12-28))2, was formed upon air oxidation of this peptide. The diffusion coefficient of the ([Cys20]β(12-28))2 peptide was measured and used to estimate the diffusion coefficient of the β(12-28) dimer. Using the monomeric and dimeric diffusion coeffs. measured for the glycine and cysteine analogs, the concentration dependence of the β(12-28) diffusion coefficient was found to be consistent with a monomer-dimer aggregation model.

ST beta amyloid peptide aggregation monomer dimer

IT Aggregation
Diffusion
Hydrophobicity
Self-association
(β-amyloid peptide and analogs monomer-dimer aggregation studied by pulsed-field gradient NMR spectroscopy)

IT Peptides, biological studies
RL: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); PROC (Process)
(β-amyloid peptide and analogs monomer-dimer aggregation studied by pulsed-field gradient NMR spectroscopy)

IT 107015-83-8
RL: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); PROC (Process)
(β-amyloid peptide and analogs monomer-dimer aggregation studied by pulsed-field gradient NMR spectroscopy)

IT 206198-56-3P **206198-57-4P** 206281-19-8P
RL: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); PROC (Process)
(β-amyloid peptide and analogs monomer-dimer aggregation studied by pulsed-field gradient NMR spectroscopy)

RE.CNT 55 THERE ARE 55 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

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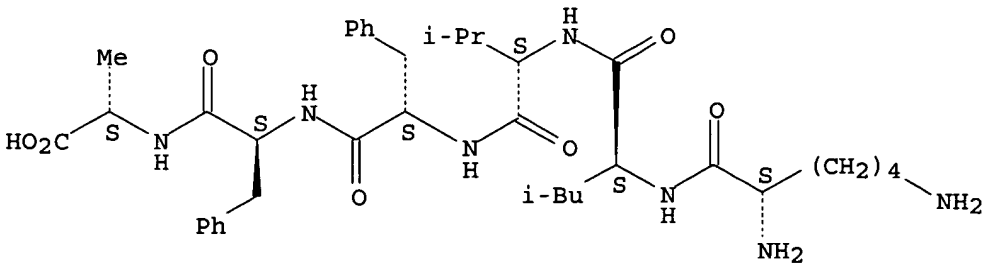
IT **206198-57-4P**
RL: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); PROC (Process)
(β-amyloid peptide and analogs monomer-dimer aggregation studied by pulsed-field gradient NMR spectroscopy)

RN 206198-57-4 HCAPLUS

CN L-Alanine, L-lysyl-L-leucyl-L-valyl-L-phenylalanyl-L-phenylalanyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L45 ANSWER 21 OF 30 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 1997:515794 HCAPLUS

DN 127:117394
ED Entered STN: 14 Aug 1997
TI Peptide binding the KLVFF sequence of amyloid β
IN Nordstedt, Christer; Naslund, Jan; Thyberg, Johan; Tjernberg, Lars O.; Terenius, Lars
PA Karolinska Innovations Ab, Swed.; Nordstedt, Christer; Naslund, Jan; Thyberg, Johan; Tjernberg, Lars O.; Terenius, Lars
SO PCT Int. Appl., 30 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM C07K014-47
ICS C07K007-04
CC 1-11 (Pharmacology)
Section cross-reference(s): 14, 34
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9721728	A1	19970619	WO 1996-SE1621	19961209 <--
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	EP 866805	A1	19980930	EP 1996-940740	19961209 <--
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
	US 6331440	B1	20011218	US 1998-95106	19980610 <--
	US 2002094957	A1	20020718	US 2001-850061	20010508 <--
	US 2004157781	A1	20040812	US 2003-721774	20031126 <--
PRAI	SE 1995-4467	A	19951212 <--		
	US 1995-9386P	P	19951229 <--		
	WO 1996-SE1621	W	19961209 <--		
	US 1998-95106	A3	19980610 <--		
	US 2001-850061	A1	20010508		

CLASS

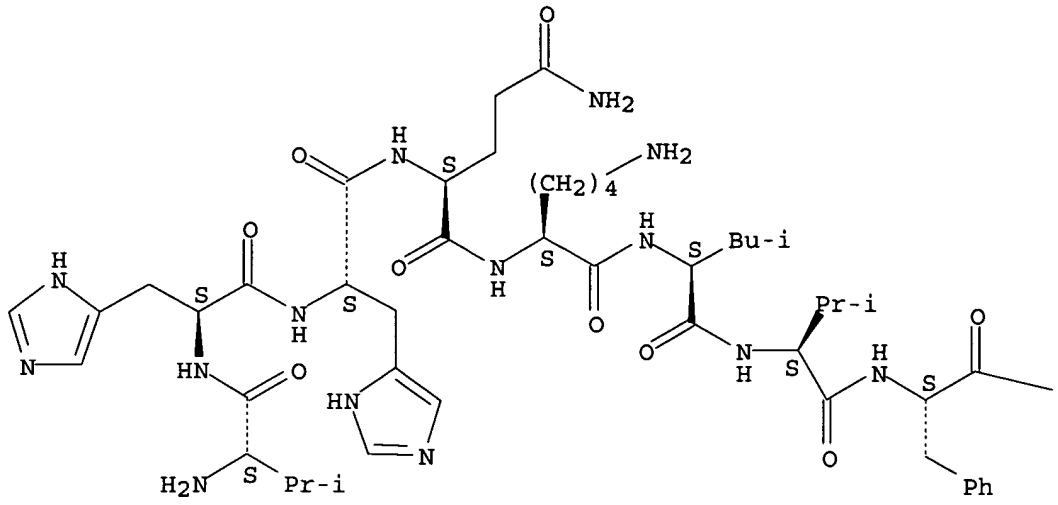
PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 9721728	ICM	C07K014-47
	ICS	C07K007-04
WO 9721728	ECLA	C07K005/08A1B; C07K005/08B; C07K005/08C; C07K005/08H1; C07K005/10A1B; C07K005/10B; C07K005/10C; C07K005/10H; C07K014/47A3; G01N033/68V2 <--
US 6331440	ECLA	C07K014/47A3; G01N033/68V2 <--
US 2002094957	ECLA	C07K005/08A1B; C07K005/08B; C07K005/08C; C07K005/08H1; C07K005/10A1B; C07K005/10B; C07K005/10C; C07K005/10H; C07K014/47A3; G01N033/68V2 <--
US 2004157781	ECLA	C07K005/08A1B; C07K005/08B; C07K005/08C; C07K005/08H1; C07K005/10A1B; C07K005/10B; C07K005/10C; C07K005/10H; C07K014/47A3; G01N033/68V2 <--

AB The invention relates to compds. of formula which are of interest especially for inhibition of polymerization of amyloid β peptide, as model substances for synthesis of amyloid β peptide-ligands, as tool for the identification of other organic compds. with similar functional properties and/or as ligands for detection of amyloid deposits using E.G. positron emission topog. (PET). KLVFF, an amyloid β sequence, was identified and was shown to be required for amyloid fibril formation. Ligands binding to KLVFF may inhibit fibril formation and could be of therapeutic

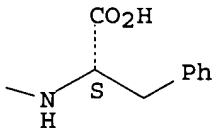
value in treatment of Alzheimer's disease.
ST beta amyloid polymn KLVFF sequence inhibitor
IT Alzheimer's disease
(peptide binding the KLVFF sequence of amyloid β and inhibition of amyloid polymerization)
IT Peptides, biological studies
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PNU (Preparation, unclassified); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(peptide binding the KLVFF sequence of amyloid β and inhibition of amyloid polymerization)
IT Amyloid
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(β-; peptide binding the KLVFF sequence of amyloid β and inhibition of amyloid polymerization)
IT 64533-15-9P **134649-29-9P** 138647-36-6P 141684-15-3P
152647-23-9P **153247-40-6P** **176390-00-4P**
176390-01-5P **176390-02-6P** **176390-03-7P**
176390-04-8P **176390-05-9P** **176390-06-0P** 176390-07-1P
176390-08-2P **176390-09-3P** **176390-10-6P** 176390-11-7P
176390-12-8P 176390-13-9P **176390-14-0P** 176390-15-1P
176390-16-2P 176390-17-3P 176390-18-4P **176390-19-5P**
176390-20-8P 176390-21-9P 176390-22-0P 176390-23-1P 176390-24-2P
176390-25-3P 176390-26-4P 176390-27-5P 176390-28-6P 176390-29-7P
189064-06-0P 192699-30-2P **192699-31-3P** 192699-32-4P
192699-33-5P 192699-34-6P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PNU (Preparation, unclassified); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(peptide binding the KLVFF sequence of amyloid β and inhibition of amyloid polymerization)
IT **134649-29-9P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PNU (Preparation, unclassified); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(peptide binding the KLVFF sequence of amyloid β and inhibition of amyloid polymerization)
RN 134649-29-9 HCAPLUS
CN L-Phenylalanine, L-valyl-L-histidyl-L-histidyl-L-glutaminyl-L-lysyl-L-leucyl-L-valyl-L-phenylalanyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



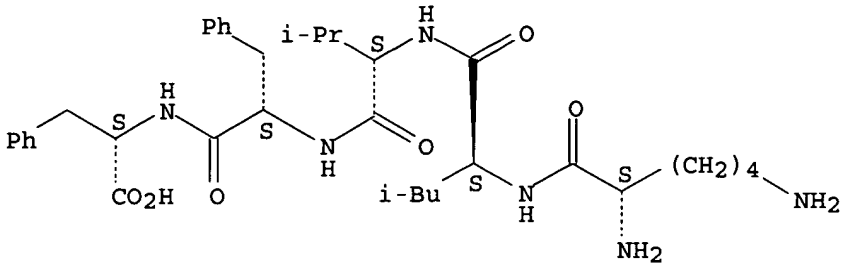
PAGE 1-B



L45 ANSWER 22 OF 30 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 1997:458252 HCAPLUS
DN 127:107496
ED Entered STN: 23 Jul 1997
TI Controlling amyloid β-peptide fibril formation with protease-stable ligands. [Erratum to document cited in CA127:32334]
AU Tjernberg, Lars O.; Lilliehook, Christina; Callaway, David J. E.; Naslund, Jan; Hahne, Solveig; Thyberg, Johan; Terenius, Lars; Nordstedt, Christer
CS Lab. Biochem. Mol. Pharmacol., Sect. Drug Dependence Res., Dep. Clinical Neurosci., Karolinska Hosp., Stockholm, S-171 76, Swed.
SO Journal of Biological Chemistry (1997), 272(28), 17894
CODEN: JBCHA3; ISSN: 0021-9258
PB American Society for Biochemistry and Molecular Biology
DT Journal
LA English
CC 14-10 (Mammalian Pathological Biochemistry)
Section cross-reference(s): 1
AB The micrograph in Fig. 5 did not reproduce adequately. Fig. 5 is

reproduced in better quality.
ST erratum Alzheimer amyloid fibril peptide ligand; Alzheimer amyloid fibril peptide ligand erratum
IT Combinatorial library
Molecular association
Molecular modeling
Protein motifs
(D-pentapeptides effect on β-amyloid peptide fibril formation (Erratum))
IT Peptidomimetics
(D-pentapeptides effect on β-amyloid peptide fibril formation in relation to (Erratum))
IT Structure-activity relationship
(amyloid peptide-binding; of peptide homologs (Erratum))
IT Organelle
(fibril; D-pentapeptides effect on β-amyloid peptide fibril formation (Erratum))
IT Peptides, biological studies
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); PROC (Process)
(pentapeptides; D-pentapeptides effect on β-amyloid peptide fibril formation (Erratum))
IT 131438-79-4
RL: ADV (Adverse effect, including toxicity); BIOL (Biological study)
(D-pentapeptides effect on β-amyloid peptide fibril formation (Erratum))
IT 190775-15-6 190775-16-7 190775-17-8 190775-18-9 190775-19-0
190775-20-3 190775-21-4 190775-22-5 190775-23-6 190775-24-7
190775-25-8 190775-26-9 190775-27-0 190775-28-1 190775-29-2
190775-30-5 190775-31-6 190775-32-7 190775-33-8 190775-34-9
190775-35-0 190775-36-1 190775-37-2 190775-38-3 190775-39-4
190775-40-7 190775-41-8 190775-42-9 190775-43-0 190775-44-1
190775-45-2 190775-46-3 190775-47-4 190775-48-5 190775-49-6
190775-50-9 190775-51-0 190775-52-1 190775-53-2
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); PROC (Process)
(D-pentapeptides effect on β-amyloid peptide fibril formation (Erratum))
IT 190775-13-4
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(peptide homolog association with (Erratum))
IT **153247-40-6D**, peptides-containing
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); PROC (Process)
(β-amyloid peptide association with (Erratum))
IT **190775-14-5**
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(β-amyloid peptide association with (Erratum))
IT **153247-40-6D**, peptides-containing
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); PROC (Process)
(β-amyloid peptide association with (Erratum))
RN 153247-40-6 HCAPLUS
CN L-Phenylalanine, L-lysyl-L-leucyl-L-valyl-L-phenylalanyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L45 ANSWER 23 OF 30 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 1997:318416 HCAPLUS
DN 127:32334
ED Entered STN: 19 May 1997
TI Controlling amyloid β-peptide fibril formation with protease-stable ligands
AU Tjerenberg, Lars O.; Lilliehook, Christina; Callawya, David J. E.; Naslund, Jan; Hahne, Solveig; Thyberg, Johan; Terenius, Lars; Nordstedt, Christer
CS Lab. Biochem. Mol. Pharmacol., Sect. Drug Dependence Res., Dep. Clinical Neurosci., Karolinska Hosp., Stockholm, S-171 76, Swed.
SO Journal of Biological Chemistry (**1997**), 272(19), 12601-12605
CODEN: JBCHA3; ISSN: 0021-9258
PB American Society for Biochemistry and Molecular Biology
DT Journal
LA English
CC 14-10 (Mammalian Pathological Biochemistry)
Section cross-reference(s): 1
AB The authors have previously shown that short peptides incorporating the sequence KLVFF can bind to the ~40-amino acid residue Alzheimer amyloid β-peptide (Aβ) and disrupt amyloid fibril formation. Here, it is shown that KLVFF binds stereospecifically to the homologous sequence in Aβ (i.e. Aβ16-20). Mol. modeling suggests that association of the two homologous sequences leads to the formation of an atypical anti-parallel β-sheet structure stabilized primarily by interaction between the Lys, Leu, and C-terminal Phe. By screening combinatorial pentapeptide libraries exclusively composed of D-amino acids, several ligands with a general motif containing phenylalanine in the second position and leucine in the third position were identified. Ligands composed of D-amino acids were not only capable of binding Aβ but also prevented formation of amyloid-like fibrils. These ligands are protease-resistant and may thus be useful as exptl. agents against amyloid fibril formation in vivo.
ST Alzheimer amyloid fibril peptide ligand
IT Structure-activity relationship
(amyloid peptide-binding; of peptide homologs)
IT Organelle
(fibril; D-pentapeptides effect on β-amyloid peptide fibril formation)
IT Peptides, biological studies
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); PROC (Process)
(pentapeptides; D-pentapeptides effect on β-amyloid peptide fibril formation)
IT Combinatorial library
Molecular association
Molecular modeling
Protein motifs

(D-pentapeptides effect on β-amyloid peptide fibril formation)
IT Peptidomimetics
(D-pentapeptides effect on β-amyloid peptide fibril formation in relation to)
IT 190775-13-4
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(peptide homolog association with)
IT **153247-40-6D**, peptides-containing
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); PROC (Process)
(β-amyloid peptide association with)
IT **190775-14-5**
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(β-amyloid peptide association with)
IT 131438-79-4
RL: ADV (Adverse effect, including toxicity); BIOL (Biological study)
(D-pentapeptides effect on β-amyloid peptide fibril formation)
IT 190775-15-6 190775-16-7 190775-17-8 190775-18-9 190775-19-0
190775-20-3 190775-21-4 190775-22-5 190775-23-6 190775-24-7
190775-25-8 190775-26-9 190775-27-0 190775-28-1 190775-29-2
190775-30-5 190775-31-6 190775-32-7 190775-33-8 190775-34-9
190775-35-0 190775-36-1 190775-37-2 190775-38-3 190775-39-4
190775-40-7 190775-41-8 190775-42-9 190775-43-0 190775-44-1
190775-45-2 190775-46-3 190775-47-4 190775-48-5 190775-49-6
190775-50-9 190775-51-0 190775-52-1 190775-53-2
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); PROC (Process)
(D-pentapeptides effect on β-amyloid peptide fibril formation)
RE.CNT 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Benet, L; Goodman and Gilman's The Pharmacological Basis of Therapeutics 1996, P3
(2) Buxbaum, J; Proc Natl Acad Sci U S A 1990, V87, P6003 HCAPLUS
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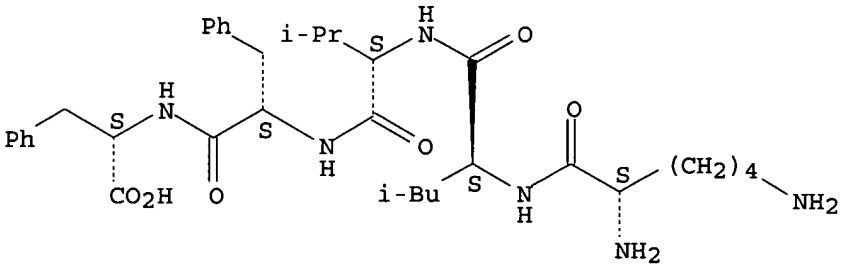
(32) Wisniewski, T; Biochem Biophys Res Commun 1991, V179, P1247 HCAPLUS
(33) Yankner, B; Science 1990, V250, P279 HCAPLUS

IT **153247-40-6D**, peptides-containing
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); PROC (Process)
(β-amyloid peptide association with)
RN 153247-40-6 HCAPLUS
CN L-Phenylalanine, L-lysyl-L-leucyl-L-valyl-L-phenylalanyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L45 ANSWER 24 OF 30 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 1996:748345 HCAPLUS
DN 126:19332
ED Entered STN: 21 Dec 1996
TI Preparation of peptides as modulators of amyloid aggregation
IN Findeis, Mark A.; Benjamin, Howard; Garnick, Marc B.; Gefter, Malcolm L.; Hundal, Arvind; Kasman, Laura; Musso, Gary; Signer, Ethan R.; Wakefield, James; et al.
PA Pharmaceutical Peptides Incorporated, USA
SO PCT Int. Appl., 105 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM C07K014-47
ICS A61K038-17
CC 34-3 (Amino Acids, Peptides, and Proteins)
Section cross-reference(s): 1
FAN.CNT 7

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9628471	A1	19960919	WO 1996-US3492	19960314 <--
W: AU, CA, JP				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 5817626	A	19981006	US 1995-404831	19950314 <--
US 5854215	A	19981229	US 1995-475579	19950607 <--
AU 9652524	A1	19961002	AU 1996-52524	19960314 <--
EP 815134	A1	19980107	EP 1996-908805	19960314 <--
EP 815134	B1	20020605		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 11514333	T2	19991207	JP 1996-527816	19960314 <--
AT 218583	E	20020615	AT 1996-908805	19960314 <--
AU 759036	B2	20030403	AU 2000-35389	20000519 <--
AU 769915	B2	20040212	AU 2002-15539	20020211 <--

PRAI US 1995-404831 A 19950314 <--
US 1995-475579 A 19950607 <--
US 1995-548998 A 19951027 <--
AU 1996-52524 A3 19960314 <--
WO 1996-US3492 W 19960314 <--
AU 1997-42387 A3 19970827 <--

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES	
WO 9628471	ICM	C07K014-47	
	ICS	A61K038-17	
WO 9628471	ECLA	C07K014/47A3	<--
US 5817626	ECLA	C07K014/47A3	<--
US 5854215	ECLA	C07K014/47A3	<--

AB Compds. that modulate the aggregation of amyloidogenic proteins or peptides are disclosed. The modulators of the invention can promote amyloid aggregation or, more preferably, can inhibit natural amyloid aggregation. In a preferred embodiment, the compds. modulate the aggregation of natural β amyloid peptides (β-AP). In a preferred embodiment, the β amyloid modulator compds. of the invention are comprised of an Aβ aggregation core domain and a modifying group coupled thereto such that the compound alters the aggregation or inhibits the neurotoxicity of natural β amyloid peptides when contacted with the peptides. Furthermore, the modulators are capable of altering natural β-AP aggregation when the natural β-APs are in a molar excess amount relative to the modulators. Pharmaceutical compns. comprising the compds. of the invention, and diagnostic and treatment methods for amyloidogenic diseases using the compds. of the invention, are also disclosed. These peptide compds. are bound to natural β-amyloid peptides to facilitate diagnosis of a β-amyloidogenic disease, in particular Alzheimer's disease, and are useful for treating a disorder associated with amyloidosis including, e.g. familial amyloid polyneuropathy or cardiomyopathy, isolated cardiac amyloid, systemic senile amyloidosis, scrapie, bovine spongiform encephalopathy, and Creutzfeldt-Jakob disease. Thus, N-biotinyl-DAEFRHDSGYEVHHQKLVFFAEDVGSNKGAIIGLMVGGVV-OH (N-biotinyl-β-AP1-40), prepared by the solid phase synthesis using a Nα-Fmoc-based protection strategy and Fmoc-Val-Wang resin, at 1% markedly inhibited aggregation of the natural β-amyloid peptide (β-AP1-40).

ST peptide prepn modulator amyloid aggregation; diagnosis amyloidogenic disease Alzheimer disease; amyloidosis assocd disorder; familial amyloid polyneuropathy cardiomyopathy treatment peptide; isolated cardiac amyloid treatment peptide; systemic senile amyloidosis treatment peptide; scrapie treatment peptide; bovine spongiform encephalopathy treatment peptide; Creutzfeldt Jakob disease treatment peptide

IT Brain, disease
Prion diseases
(Creutzfeldt-Jakob; preparation of peptides as modulators of amyloid aggregation for treating amyloidosis-associated disorders)

IT Deafness
Urticaria
(Muckle-Wells syndrome in familial Mediterranean Fever and familial amyloid nephropathy; preparation of peptides as modulators of amyloid aggregation for treating amyloidosis-associated disorders)

IT Diagnosis
(agents, for Alzheimer's disease; preparation of peptides as modulators of amyloid aggregation for treating amyloidosis-associated disorders)

IT Heart, disease
Heart, disease
(amyloidosis, isolated; preparation of peptides as modulators of amyloid aggregation for treating amyloidosis-associated disorders)

IT Nervous system

(disease, Gerstmann-Straussler syndrome; preparation of peptides as modulators of amyloid aggregation for treating amyloidosis-associated disorders)
IT Amyloidosis
Amyloidosis
(familial Mediterranean fever, with Muckle-Wells syndrome; preparation of peptides as modulators of amyloid aggregation for treating amyloidosis-associated disorders)
IT Fever and Hyperthermia
Fever and Hyperthermia
(familial Mediterranean, with Muckle-Wells syndrome; preparation of peptides as modulators of amyloid aggregation for treating amyloidosis-associated disorders)
IT Kidney, disease
(familial amyloid nephropathy with Muckle-Wells syndrome and fibrinogen-associated hereditary renal amyloidosis; preparation of peptides as modulators of amyloid aggregation for treating amyloidosis-associated disorders)
IT Heart, disease
(familial amyloidotic cardiomyopathy; preparation of peptides as modulators of amyloid aggregation for treating amyloidosis-associated disorders)
IT Amyloidosis
(familial amyloidotic polyneuropathy, type IV; preparation of peptides as modulators of amyloid aggregation for treating amyloidosis-associated disorders)
IT Amyloidosis
(familial amyloidotic polyneuropathy; preparation of peptides as modulators of amyloid aggregation for treating amyloidosis-associated disorders)
IT Dialysis
(hemodialysis, amyloidosis associated with long term hemodialysis; preparation of peptides as modulators of amyloid aggregation for treating amyloidosis-associated disorders)
IT Brain, disease
(hemorrhage, hereditary cerebral hemorrhage with amyloidosis of Iceland type; preparation of peptides as modulators of amyloid aggregation for treating amyloidosis-associated disorders)
IT Amyloidosis
(hereditary, lysozyme-associated; preparation of peptides as modulators of amyloid aggregation for treating amyloidosis-associated disorders)
IT Pancreatic islet of Langerhans
(insulinoma; preparation of peptides as modulators of amyloid aggregation for treating amyloidosis-associated disorders)
IT Carcinoma
(medullary, amyloidosis associated with thyroid medullary carcinoma; preparation of peptides as modulators of amyloid aggregation for treating amyloidosis-associated disorders)
IT Macroglobulins
RL: BPN (Biosynthetic preparation); BIOL (Biological study); PREP (Preparation)
(metabolic disorders, macroglobulinemia, myeloma or macroglobulinemia-associated amyloidosis; preparation of peptides as modulators of amyloid aggregation for treating amyloidosis-associated disorders)
IT Multiple myeloma
(myeloma or macroglobulinemia-associated amyloidosis; preparation of peptides as modulators of amyloid aggregation for treating amyloidosis-associated disorders)
IT Diabetes mellitus
(non-insulin-dependent; preparation of peptides as modulators of amyloid aggregation for treating amyloidosis-associated disorders)

IT Nerve, disease
(polyneuropathy, familial amyloid; preparation of peptides as modulators of amyloid aggregation for treating amyloidosis-associated disorders)
IT Peptides, preparation
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of peptides as modulators of amyloid aggregation for treating amyloidosis-associated disorders)
IT Amyloid
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); MSC (Miscellaneous); BIOL (Biological study); PREP (Preparation)
(preparation of peptides as modulators of amyloid aggregation for treating amyloidosis-associated disorders)
IT Sjogren's syndrome
(primary localized cutaneous nodular amyloidosis-associated; preparation of peptides as modulators of amyloid aggregation for treating amyloidosis-associated disorders)
IT Amyloidosis
(primary; preparation of peptides as modulators of amyloid aggregation for treating amyloidosis-associated disorders)
IT Brain, disease
Prion diseases
(scrapie; preparation of peptides as modulators of amyloid aggregation for treating amyloidosis-associated disorders)
IT Amyloidosis
(secondary; preparation of peptides as modulators of amyloid aggregation for treating amyloidosis-associated disorders)
IT Amyloidosis
(senile, systemic; preparation of peptides as modulators of amyloid aggregation for treating amyloidosis-associated disorders)
IT Brain, disease
(spongiform encephalopathy; preparation of peptides as modulators of amyloid aggregation for treating amyloidosis-associated disorders)
IT Alzheimer's disease
(treatment and diagnosis; preparation of peptides as modulators of amyloid aggregation for treating amyloidosis-associated disorders)
IT 123529-23-7P **153247-40-6P** 156858-22-9P 182912-78-3P
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183746-18-1P 183746-19-2P 183746-20-5P 183746-21-6P 183746-22-7P
183746-23-8P **183746-24-9P 183746-25-0P**
183746-26-1P 183746-27-2P 183746-28-3P
183746-30-7P 183746-31-8P 183746-33-0P 183746-36-3P
183746-39-6P 183746-42-1P 183746-44-3P **183746-46-5P**
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183746-58-9P **183746-61-4P** 183746-63-6P 183746-65-8P
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183746-73-8P 183746-75-0P 183746-77-2P 183746-79-4P 183746-80-7P
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184051-31-8P 184051-32-9P 184051-33-0P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

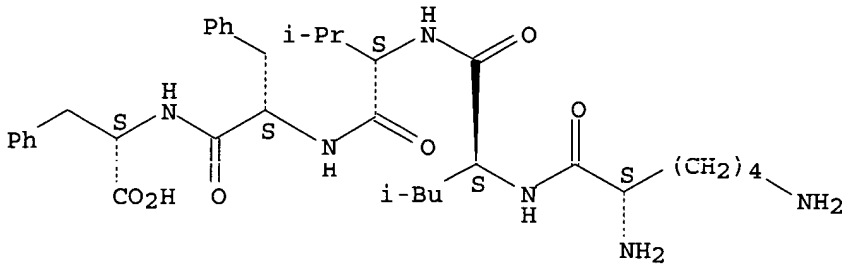
(preparation of peptides as modulators of amyloid aggregation for treating amyloidosis-associated disorders)

IT 58-85-5, Biotin 64-19-7, Acetic acid, reactions 67-43-6 81-25-4, Cholic acid 40248-63-3, (-)-Menthoxyacetic acid 68858-20-8D, Wang resin-bound 72088-94-9 131438-79-4 183745-73-5 183745-81-5 183745-82-6
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of peptides as modulators of amyloid aggregation for treating amyloidosis-associated disorders)

IT **153247-40-6P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of peptides as modulators of amyloid aggregation for treating amyloidosis-associated disorders)

RN 153247-40-6 HCAPLUS
CN L-Phenylalanine, L-lysyl-L-leucyl-L-valyl-L-phenylalanyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

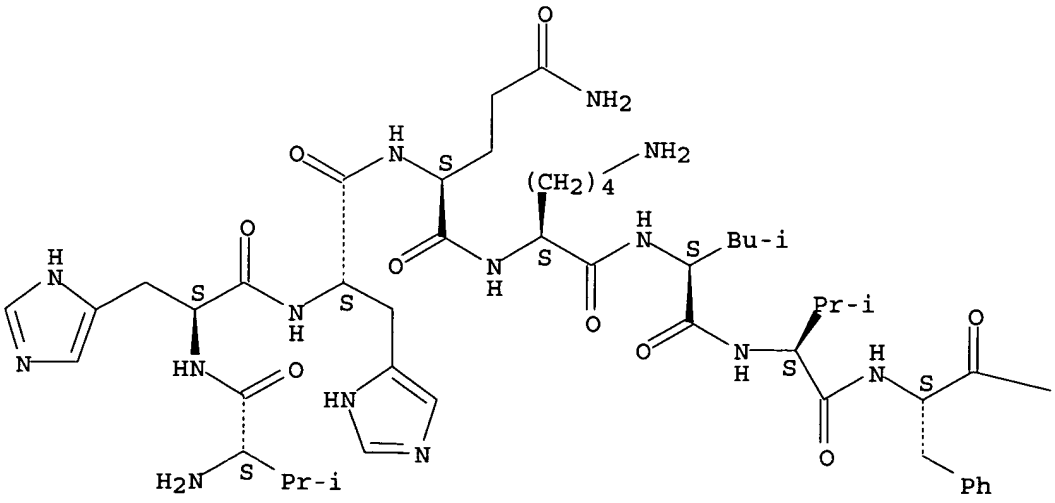


L45 ANSWER 25 OF 30 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 1996:233397 HCAPLUS
DN 124:306542
ED Entered STN: 20 Apr 1996
TI Arrest of β-amyloid fibril formation by a pentapeptide ligand
AU Tjernberg, Lars O.; Naeslund, Jan; Lindqvist, Fredrik; Johansson, Jan; Karlstroem, Anders R.; Thyberg, Johan; Terenius, Lars; Nordstedt, Christer
CS Laboratory Biochemistry Molecular Pharmacology, Karolinska Hospital, Stockholm, S-171 76, Swed.
SO Journal of Biological Chemistry (**1996**), 271(15), 8545-8
CODEN: JBCHA3; ISSN: 0021-9258
PB American Society for Biochemistry and Molecular Biology
DT Journal
LA English
CC 1-3 (Pharmacology)
AB Polymerization of amyloid β-peptide (Aβ) into amyloid fibrils is a critical step in the pathogenesis of Alzheimer's disease. Here, we show that peptides incorporating a short Aβ fragment (KLVFF; Aβ16-20) can bind full-length Aβ and prevent its assembly into amyloid fibrils. Through alanine substitution, it was demonstrated that amino acids Lys16, Leu17, and Phe20 are critical for binding to Aβ and inhibition of Aβ fibril formation. A mutant Aβ mol., in which these residues had been substituted, had a markedly reduced capability of forming amyloid fibrils. The present data suggest that residues Aβ16-20 serve as a binding sequence during Aβ polymerization and fibril formation. Moreover, the present KLVFF peptide may serve as a lead compound for the development of peptide and nonpeptide agents aimed at inhibiting Aβ amyloidogenesis in vivo.
ST pentapeptide amyloidogenesis inhibitor Alzheimer disease

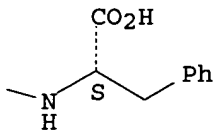
IT Molecular structure-biological activity relationship
(amyloidogenesis-inhibiting; arrest of β-amyloid fibril formation by a pentapeptide ligand)
IT Peptides, biological studies
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(arrest of β-amyloid fibril formation by a pentapeptide ligand)
IT Mental disorder
(Alzheimer's disease, arrest of β-amyloid fibril formation by a pentapeptide ligand)
IT Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(amyloid A4, arrest of β-amyloid fibril formation by a pentapeptide ligand)
IT 64533-15-9 **134649-29-9** 138647-36-6 141684-15-3 152647-23-9
153247-40-6 **176390-00-4** **176390-01-5**
176390-02-6 **176390-03-7** 176390-04-8
176390-05-9 **176390-06-0** 176390-07-1 176390-08-2
176390-09-3 **176390-10-6** 176390-11-7 176390-12-8
176390-13-9 **176390-14-0** 176390-15-1 176390-16-2
176390-17-3 176390-18-4 **176390-19-5** 176390-20-8
176390-21-9 176390-22-0 176390-23-1 176390-24-2 176390-25-3
176390-26-4 176390-27-5 176390-28-6 176390-29-7
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(arrest of β-amyloid fibril formation by a pentapeptide ligand)
IT **134649-29-9**
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(arrest of β-amyloid fibril formation by a pentapeptide ligand)
RN 134649-29-9 HCAPLUS
CN L-Phenylalanine, L-valyl-L-histidyl-L-histidyl-L-glutaminyl-L-lysyl-L-leucyl-L-valyl-L-phenylalanyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



L45 ANSWER 26 OF 30 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 1995:594478 HCAPLUS
DN 123:977
ED Entered STN: 08 Jun 1995
TI Peptides for amelioration of amnesia in Alzheimer's disease caused by deposition of amyloid beta protein
IN Roberts, Eugene
PA City of Hope, USA
SO PCT Int. Appl., 26 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM A61K038-00
ICS C07K005-00; C07K007-00; C07K017-00
CC 1-11 (Pharmacology)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
PI	WO 9508999	A1	19950406	WO 1994-US10475	19940916	<--
	W: CA, US					
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE					
	US 5470951	A	19951128	US 1993-127904	19930929	<--
	CA 2149627	AA	19950406	CA 1994-2149627	19940916	<--
	EP 670731	A1	19950913	EP 1994-929818	19940916	<--
	R: DE, FR, GB					
PRAI	US 1993-127904	A	19930929	<--		
	WO 1994-US10475	W	19940916	<--		

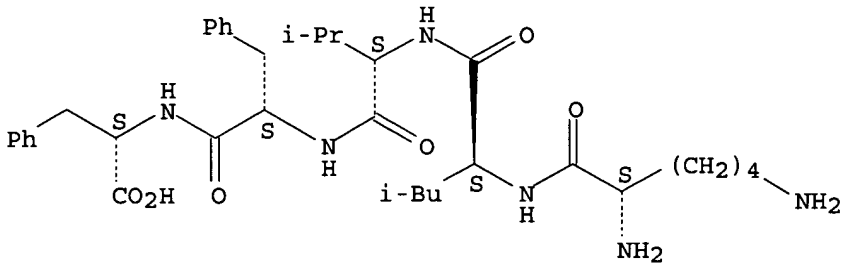
CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES	
WO 9508999	ICM	A61K038-00	
	ICS	C07K005-00; C07K007-00; C07K017-00	
WO 9508999	ECLA	C07K005/10A1A; C07K005/10C; C07K014/47A3	<--
US 5470951	ECLA	C07K005/10A1A; C07K005/10C; C07K014/47A3	<--

OS MARPAT 123:977
AB Three non-amnestic and non-memory enhancing peptides, Asp-Phe-Phe-Val-Gly, Gln-Phe-Val-Gly, and Ala-Ile-Phe-Thr, that block the amnestic effects of β-(12-28), a peptide homologs to amyloid β protein (Aβ), are disclosed. The invention relates to amelioration of amnesia and other neurotoxicity in Alzheimer's disease (AD) caused by deposition of Aβ and, therefore, relates to attenuation of the disease process and consequential improvement of the quality of life for the individuals

suffering from AD. The effects of a series of peptides on the amnestic effects of β(12-28) in mice were determined
ST Alzheimer disease amnesia treatment peptide
IT Amnesia
(peptides for amelioration of amnesia in Alzheimer's disease caused by deposition of amyloid β protein)
IT Peptides, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(peptides for amelioration of amnesia in Alzheimer's disease caused by deposition of amyloid β protein)
IT Mental disorder
(Alzheimer's disease, peptides for amelioration of amnesia in Alzheimer's disease caused by deposition of amyloid β protein)
IT Proteins, specific or class
RL: ADV (Adverse effect, including toxicity); BIOL (Biological study)
(amyloid A4, peptides for amelioration of amnesia in Alzheimer's disease caused by deposition of amyloid β protein)
IT 2131-06-8 2577-40-4, Phenylalanyl phenylalanine 3918-94-3, Valyl valine 53932-31-3 64533-12-6 140941-10-2 **153247-40-6**
153247-41-7 153247-43-9 153247-49-5 153247-51-9 163623-31-2
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(peptides for amelioration of amnesia in Alzheimer's disease caused by deposition of amyloid β protein)
IT 153247-44-0 153247-44-0D, esters and amides 153247-48-4
153247-48-4D, esters and amides 153247-50-8 153247-50-8D, esters and amides
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(peptides for amelioration of amnesia in Alzheimer's disease caused by deposition of amyloid β protein)
IT **153247-40-6**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(peptides for amelioration of amnesia in Alzheimer's disease caused by deposition of amyloid β protein)
RN 153247-40-6 HCAPLUS
CN L-Phenylalanine, L-lysyl-L-leucyl-L-valyl-L-phenylalanyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L45 ANSWER 27 OF 30 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 1995:573971 HCAPLUS
DN 122:306561
ED Entered STN: 26 May 1995
TI Use of a topographic receptor model to identify the binding site for amnestic peptides and the design of memory-enhancing drugs
IN Roberts, Eugene
PA City of Hope, USA
SO PCT Int. Appl., 50 pp.

CODEN: PIXXD2
DT Patent
LA English
IC ICM A61K038-00
ICS C07K005-00; C07K005-08; C07K005-10
CC 1-11 (Pharmacology)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9507093	A1	19950316	WO 1994-US10083	19940908 <--
	W: CA, US				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	US 5652334	A	19970729	US 1993-117927	19930908 <--
	CA 2148452	AA	19950315	CA 1994-2148452	19940908 <--
	EP 668776	A1	19950830	EP 1994-928038	19940908 <--
	EP 668776	B1	20000412		
	R: DE, FR, GB				
PRAI	US 1993-117927	A	19930908 <--		
	WO 1994-US10083	W	19940908 <--		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 9507093	ICM	A61K038-00
	ICS	C07K005-00; C07K005-08; C07K005-10
WO 9507093	ECLA	C07K005/02A; C07K005/02B; C07K005/02C; C07K005/10B <--
US 5652334	ECLA	C07K005/02A; C07K005/02B; C07K005/02C; C07K005/10B <--

AB A topog. model useful to design and synthesize memory-enhancing substances is disclosed. Administration of substances designed by this method to enhance memory in mammals, including humans, is disclosed. Such substances include peptides having the amino acid sequence Val-Phe-Phe. Compds. with potential uses as memory enhancers were tested by their effects on learning an avoidance response. The structure and activity relationships were used to determine the topog. for the binding sites for these compds. A potential memory-enhancing substance is designed on the basis of these data.

ST amnestic peptide receptor topog model; memory enhancing drug receptor model

IT Peptides, biological studies
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(amnestic; use of topog. receptor model to identify binding site for amnestic peptides and design of memory-enhancing drugs)

IT Quantitative structure-activity relationship
(memory-affecting; use of topog. receptor model to identify binding site for amnestic peptides and design of memory-enhancing drugs)

IT Memory, biological
Simulation and Modeling, biological
(use of topog. receptor model to identify binding site for amnestic peptides and design of memory-enhancing drugs)

IT Molecular structure-biological activity relationship
(memory-affecting, use of topog. receptor model to identify binding site for amnestic peptides and design of memory-enhancing drugs)

IT 67412-83-3 99473-67-3 99896-85-2 107015-83-8 112163-49-2
134649-29-9 153247-41-7 153247-46-2 153247-53-1
153287-77-5 163350-37-6 163350-38-7 163350-39-8 163350-40-1
163350-41-2 163350-42-3 163350-43-4 163350-44-5 163350-45-6
163350-46-7 163350-47-8 163350-48-9 163350-49-0
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)
(memory enhancing activity of; use of topog. receptor model to identify binding site for amnestic peptides and design of memory-enhancing drugs)

IT 153247-47-3
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(peptides containing, as memory enhancers; use of topog. receptor model to identify binding site for amnestic peptides and design of memory-enhancing drugs)

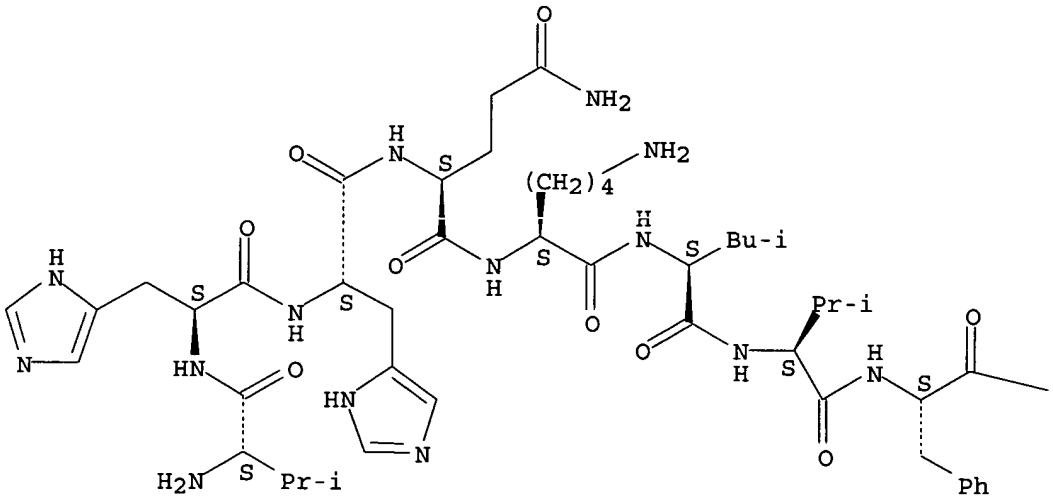
IT **134649-29-9**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)
(memory enhancing activity of; use of topog. receptor model to identify binding site for amnestic peptides and design of memory-enhancing drugs)

RN 134649-29-9 HCAPLUS

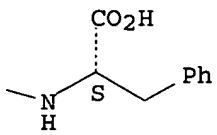
CN L-Phenylalanine, L-valyl-L-histidyl-L-histidyl-L-glutaminyl-L-lysyl-L-leucyl-L-valyl-L-phenylalanyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



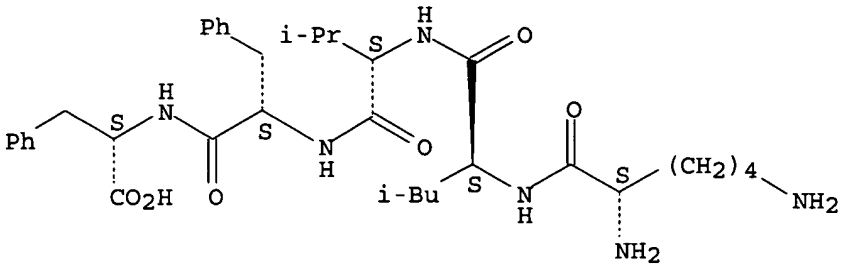
PAGE 1-B



L45 ANSWER 28 OF 30 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 1994:131262 HCAPLUS
DN 120:131262
ED Entered STN: 19 Mar 1994
TI Topography of a binding site for small amnestic peptides deduced from structure-activity studies: relation to amnestic effect of amyloid β protein
AU Flood, James F.; Roberts, Eugene; Sherman, Mark A.; Kaplan, Bruce E.; Morley, John E.
CS Geriatr. Res. Educat. clin. Cent. (GRECC), St. Louis, MO, 63106, USA
SO Proceedings of the National Academy of Sciences of the United States of America (**1994**), 91(1), 380-4
CODEN: PNASA6; ISSN: 0027-8424
DT Journal
LA English
CC 14-10 (Mammalian Pathological Biochemistry)
Section cross-reference(s): 1
AB Four peptides homologous to amyloid β protein containing the Val-Phe-Phe (VFF) sequence administered intracerebroventricularly after training caused amnesia for footshock active avoidance training in mice. Results with VFF and other peptides containing VFF or portions there of were used to generate a topog. map for a hypothetical binding surface for amnestic peptides, termed Z. Effects on retention of footshock active avoidance training were rationalized in terms of fit to Z, making possible design of potential memory-modulating peptidic and nonpeptidic substances. Three peptides that neither improved nor impaired retention blocked the amnestic effects of β-(12-28), a peptide homologous to amyloid β protein, opening the way to development of substances that can antagonize the neurotoxic effects of amyloid β protein on neural structures and thus attenuate symptoms and progression of Alzheimer disease.
ST amyloid beta protein amnestic peptide
IT Amnesia
Memory, biological
(small peptides related to amyloid β protein mediation of, structure-activity in)
IT Proteins, specific or class
RL: BIOL (Biological study)
(amyloid A4, small amnestic peptides in relation to, structure-activity in)
IT Molecular structure-biological activity relationship
(memory-affecting, small peptides related to amyloid β protein in)
IT 2131-06-8 2577-40-4 3918-90-9 3918-92-1 3918-94-3 53932-31-3
64533-12-6 64533-15-9 65111-46-8 67412-83-3 99473-67-3
140941-10-2 153247-39-3 **153247-40-6** 153247-41-7
153247-42-8 153247-43-9 153247-44-0 153247-45-1 153247-46-2
153247-47-3 153247-48-4 153247-49-5 153247-50-8 153247-51-9
153247-52-0 153247-53-1 153287-77-5
RL: PRP (Properties)
(amnestic effect of, structure-activity in, amyloid β protein in relation to)
IT **153247-40-6**
RL: PRP (Properties)
(amnestic effect of, structure-activity in, amyloid β protein in relation to)
RN 153247-40-6 HCAPLUS
CN L-Phenylalanine, L-lysyl-L-leucyl-L-valyl-L-phenylalanyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L45 ANSWER 29 OF 30 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 1993:671728 HCAPLUS
DN 119:271728
ED Entered STN: 25 Dec 1993
TI Preparation of pseudopentapeptides with immunomodulating activity
IN Degraw, Joseph I.; Almquist, Ronald; Hiebert, Charles; Smith, R. Lane; Uchida, Itsuo
PA Japan Tobacco, Inc., Japan
SO PCT Int. Appl., 201 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM C07K005-02
ICS C07K007-02; A61K037-02; C07K015-00
CC 34-3 (Amino Acids, Peptides, and Proteins)
Section cross-reference(s): 1, 15
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9304080	A1	19930304	WO 1992-JP1046	19920819 <--
	W: CA, JP, KR				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, SE				
	CA 2094822	AA	19930227	CA 1992-2094822	19920819 <--
	EP 556405	A1	19930825	EP 1992-917987	19920819 <--
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, SE				
	JP 06501961	T2	19940303	JP 1993-504226	19920819 <--
PRAI	US 1991-749886	A	19910826 <--		
	US 1992-920601	A	19920803 <--		
	WO 1992-JP1046	W	19920819 <--		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 9304080	ICM	C07K005-02
	ICS	C07K007-02; A61K037-02; C07K015-00

OS MARPAT 119:271728
AB Thymopentin (thypentin) analogs, e.g. R-AA1-AA2-AA3-AA4-AA5-R1 [AA1 = L- or D-Arg; AA2 = optionally N-C1-6 alkylated L- or D-basic amino acid residue, a neutral/nonarom. amino acid residue, or Pro; AA3 = L- or D-Asp or Glu optionally esterified with C1-6 alkyl; AA4 = L- or D-neutral/nonarom. amino acid residue; AA5 = optionally N-C1-6 alkylated L- or D-neutral/nonarom. amino acid residue (wherein one or more H's of its aromatic portion can be substituted by NO2 or halo) or L- or D-neutral/nonpolar/large/nonarom. amino acid residue; R = C1-6 acyl, arylsulfonyl, alkylsulfonyl, arylalkylsulfonyl, alkoxycarbonyl; R1 = OH, NR2R3 (wherein R2, R3 = H, C1-6 alkyl), OR4 (R4 = C1-6 alkyl); wherein at least one of the linkages AA1-AA2, AA2-AA3, AA3-AA4, and AA4-AA5 is a modified peptide linkage selected from COCH2, CH(OH)CH2, and CH2NH and the remaining linkages are CONH or CONMe], useful for the treatment of autoimmune and infectious diseases (e.g. arthritis), are prepared Thus,

coupling of a Grignard reagent PhCH2CH(CH:CH2)CH2MgBr (preparation given) with N-trityl-L-valine 2-mercaptopyridine ester (preparation given) in THF at 50-60° for 2 h followed by N-deprotection with p-MeC6H4SO3H in MeCN and N-protection with (Me3CO)2CO in CH2Cl2 containing Et3N gave N-tert-butoxycarbonyl-6-amino-7-methyl-3-benzyl-1-octen-5-one. Oxidation of the latter with RuO2.xH2O/NaIO4 in aqueous acetone gave 5-N-tert-butoxycarbonylamino-6-methyl-2-benzyl-4-oxoheptanoic acid which was bound to a Merrifield chloromethyl resin and underwent solid-phase peptide coupling with Boc-Lys(ClZ)-Asp(OcHex)-OH (ClZ = 2-chlorobenzyloxycarbonyl, cHex = cyclohexyl) (preparation given) and Boc-Arg(Tos)-OH using DCC and hydroxybenzotriazole to give, after deprotection and resin cleavage, H-Arg-Lys-Asp-Val(k)Phe-OH [wherein (k) indicates the linkage COCH2 as a replacement for CONH] (I). In a competitive binding assay, I at 10-3 and 10-4 M in vitro reduced the mean total count of tritiated thymopentin bound to CEM cells from 3,078 cpm (in the absence of a competitor) to 844 cpm vs. 1,150 cpm for non-radiolabeled thymopentin. The peptide analogs in vitro also increased the release of cyclic GMP in CEM cells, the production of Thy-1 antigens in spleen cells of nu/nu mice, and the serum half-life in mouse and human serum.

ST pseudopentapeptide prepn immunomodulating activity; autoimmune treatment pseudopentapeptide; infectious disease treatment pseudopentapeptide; thymopentin thypentin analog prepn immunomodulator

IT Immunostimulants
Immunosuppressants
(pseudopentapeptide thymopentin analogs)

IT Autoimmune disease
Infection
(treatment of, pseudopentapeptide thymopentin analogs for)

IT Inflammation inhibitors
(antiarthritics, pseudopentapeptide thymopentin analogs)

IT Peptides, preparation
RL: SPN (Synthetic preparation); PREP (Preparation)
(penta-, pseudo-, thymopentin analogs, preparation of, as immunomodulator)

IT 72210-37-8P 151012-26-9P 151012-27-0P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and reaction of, in preparation of immunomodulating pseudopentapeptide thymopentin analog)

IT 151011-32-4P 151011-34-6P 151011-36-8P 151011-37-9P 151011-39-1P
151011-41-5P 151011-43-7P 151011-45-9P 151011-47-1P 151011-49-3P
151011-51-7P 151011-53-9P 151011-54-0P 151011-55-1P 151011-57-3P
151011-59-5P 151011-61-9P 151011-62-0P 151011-64-2P 151011-65-3P
151011-67-5P 151011-69-7P **151011-70-0P 151011-71-1P**
151011-72-2P 151011-73-3P 151011-74-4P 151011-75-5P 151011-76-6P
151011-77-7P 151036-34-9P 151036-36-1P 151036-37-2P 151121-46-9P
151121-48-1P 151121-50-5P 151121-52-7P 151121-54-9P 151121-56-1P
151121-58-3P 151121-60-7P 151121-62-9P 151121-64-1P 151121-66-3P
151121-67-4P 151121-69-6P 151121-71-0P 151121-72-1P 151121-75-4P
151121-77-6P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as immunomodulator)

IT 962-39-0P, L-Phenylalanine benzyl ester 63628-63-7P 78314-61-1P
80514-64-3P 80622-02-2P 82068-75-5P 89760-63-4P 103143-66-4DP, MBHA resin-bound 139033-47-9P 151011-78-8P 151011-79-9P
151011-80-2P 151011-81-3P 151011-82-4P 151011-83-5P 151011-84-6P
151011-85-7DP, Resin-bound 151011-86-8DP, Resin-bound 151011-87-9P
151011-88-0P 151011-89-1DP, Resin-bound 151011-89-1P 151011-90-4P
151011-91-5P 151011-92-6P 151011-93-7P 151011-94-8P 151011-95-9P
151011-96-0P 151011-97-1DP, Resin-bound 151011-99-3DP, Resin-bound
151012-00-9P 151012-01-0P 151012-02-1P 151012-03-2P 151012-04-3P
151012-05-4P 151012-06-5P 151012-07-6P 151012-08-7P 151012-09-8P
151012-10-1P 151012-11-2DP, Resin-bound 151012-11-2P 151012-12-3P
151012-13-4P 151012-14-5P 151012-15-6P 151012-16-7P 151012-17-8P

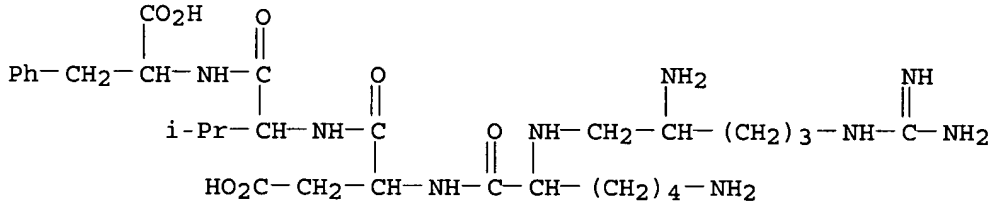
151012-18-9P 151012-19-0P 151012-20-3P 151012-21-4P 151012-25-8P
151036-38-3P 151036-39-4P 151036-40-7P 151036-41-8P 151036-42-9P
151121-73-2P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as intermediate for immunomodulating pseudopentapeptide thymopentin analog)

IT 50-00-0, Formaldehyde, reactions 56-41-7, L-Alanine, reactions 72-18-4, L-Valine, reactions 76-83-5, Trityl chloride 115-11-7, Isobutylene, reactions 334-88-3, Diazomethane 541-16-2, Di-tert-butyl malonate 542-69-8, 1-Iodobutane 542-92-7, Cyclopentadiene, reactions 1155-64-2 1738-78-9 2177-63-1 2637-34-5, 2-Mercaptopyridine 2812-46-6, L-Proline tert-butyl ester 3392-10-7 6638-79-5, N,O-Dimethylhydroxylamine hydrochloride 6921-34-2, Benzylmagnesium chloride 13734-34-4D, resin-bound 13734-34-4D, p-methylbenzhydrylamine resin-bound 13734-41-3 13836-37-8 14611-34-8 15761-38-3 21657-35-2D, resin-bound 24424-99-5, Di-tert-butyl dicarbonate 30794-77-5, 1,4-Dibromobutene 31950-55-7, 1-Bromo-2-methyl-3-butene 50774-73-7, 4-Methyl-3-bromomethyl-1-pentene 54613-99-9 57096-11-4 73821-95-1, N-tert-Butoxycarbonyl-L-aspartic acid β-cyclohexyl ester 73995-27-4 107304-39-2 151012-22-5, L-Aspartic acid benzhydryl ester 151012-23-6
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, in preparation of immunomodulating pseudopentapeptide thymopentin analog)

IT **151011-70-0P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as immunomodulator)

RN 151011-70-0 HCAPLUS

CN L-Phenylalanine, N-[N-[N-[N2-[2-amino-5-[(aminoiminomethyl)amino]pentyl]-L-lysyl]-L-α-aspartyl]-L-valyl]-, (S)- (9CI) (CA INDEX NAME)



L45 ANSWER 30 OF 30 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 1991:427112 HCAPLUS

DN 115:27112

ED Entered STN: 27 Jul 1991

TI Amnestic effects in mice of four synthetic peptides homologous to amyloid β protein from patients with Alzheimer disease

AU Flood, James F.; Morley, John E.; Roberts, Eugene

CS VA Med. Cent., St. Louis, MO, 63106, USA

SO Proceedings of the National Academy of Sciences of the United States of America (**1991**), 88(8), 3363-6
CODEN: PNASA6; ISSN: 0027-8424

DT Journal

LA English

CC 14-10 (Mammalian Pathological Biochemistry)

AB Immediate post-training intracerebroventricular administration of a synthetic peptide homologous to β-protein of brain amyloid, [Gln11]β-(1-28), caused amnesia for footshock active avoidance training in mice in a dose-dependent fashion. This effect was specific to memory processing since the peptide did not cause amnesia when injected 24 h after training nor did it disturb storage or retrieval of older memories. Shorter fragments of the amyloid β-protein consisting of

residues 12-28, 18-28, and 12-20 also were amnestic when given intracerebroventricularly, residues 12-20 being least effective. The hippocampus, a brain structure importantly involved in learning and memory, consistently shows severe pathol. changes and deposition of amyloid in patients with Alzheimer disease. Immediate post-training bilateral intrahippocampal injection of [Gln11]β-(1-28) produced amnesia at much lower doses than did [Gln11]β-(1-28) injected intracerebroventricularly. Thus these exptl. results suggest a possible direct role of amyloid β-protein or fragments thereof in an aspect of the spectrum of cognitive deficit in Alzheimer disease.

ST Alzheimer amyloid beta peptide amnesia

IT Amnesia
(from peptides homologous to amyloid β-protein of humans with Alzheimer disease)

IT Mental disorder
(Alzheimer's disease, amyloid β-protein from humans with, synthetic peptides homologous to, amnestic effect of)

IT 106686-61-7 107015-83-8 112163-49-2 **134649-29-9**
RL: PRP (Properties)
(amnestic effect of, as homolog of amyloid β-protein from humans with Alzheimer disease)

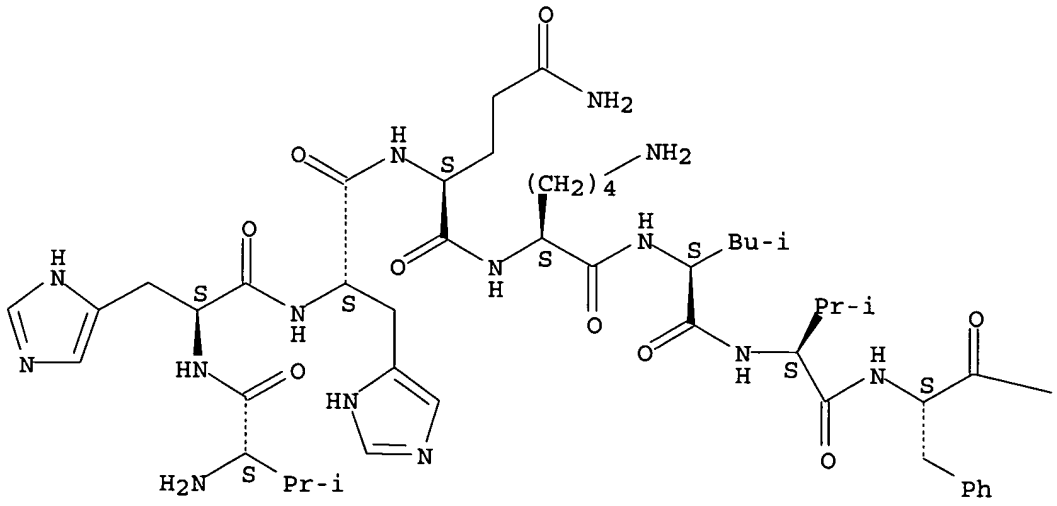
IT **134649-29-9**
RL: PRP (Properties)
(amnestic effect of, as homolog of amyloid β-protein from humans with Alzheimer disease)

RN 134649-29-9 HCAPLUS

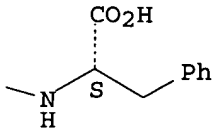
CN L-Phenylalanine, L-valyl-L-histidyl-L-histidyl-L-glutaminyl-L-lysyl-L-leucyl-L-valyl-L-phenylalanyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



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